IN SEARCH OF THE ECOLOGICALLY RESPONSIBLE SOCIETY: SUSTAINABILITY AS ECOPRAXIS

by

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ABSTRACT

The suite of problems peculiar to the late twentieth century and collectively referred to as the 'ecological crisis' is similar in character to the problems of general social collapse which confronted the thinkers of the early modern period. At issue is the inadequacy of established myths, values, knowledges and institutions in the face of novel societal and, in the case of the late twentieth century, novel ecological disturbances. Given the problems of technological optimism and widespread disappointment at the limited fulfillment of Enlightenment ideals, the thesis speculates about alternative paths for modernity and suggests that a modest scepticism relative to humanity's rational capacities is now a more fitting ethical, cognitive and practical stance.

The inadequacy of the defining myths, norms and institutions of modern life, in the face of novel ecological and social crises, can be traced to a particular conjunction of historical circumstance that demanded stability and certainty, qualities which are now supplanted by the need for flexibility and adaptability in institutional arrangements and in their supporting values and knowledges. The deficiencies of modern institutions may be explained in part by their failure to promote responsibility as a core behavioural norm. The rejuvenation of civil society and its public spheres has been proposed as the site for potential radical social transformation, which, it is argued, is implicit in the activity of new social movements and in green movements in particular, since they are in a unique position to integrate a radical critique of modernity with a radicalized ecological consciousness.

The sustainability discourse raises fundamental questions about how humans should dwell on the planet, and consequently sustainable development is examined as an attempt to respond to this quintessential dilemma of human existence in the context of generational inequity and global ecological decline. As a keystone of liberal capitalism, private property rights are found to have failed as an instrument of autonomy and of environmental protection and arguments are advanced for a different ethical basis for property ownership, one grounded in responsibility and more fitted to contemporary social and ecological realities.

Ecological theorists have proved to be strong on prescriptions for end-states, but rather weak on how to get there, on praxis. At various times in western history the praxis paradigm has been useful in providing indications for proceeding in the

face of seemingly insurmountable difficulties. Given the enormity of the problems presently confronting humankind and the apparent inability to respond to multiple danger signals, it seems appropriate to draw on the paradigm once again in order to frame a radical ecopraxis, a praxis of ecological restructuring which constitutes a programme for ecosocial transformation, radical in its objectives but modest in its means.

In the disillusioned light of earlier utopian ideals, the question of whether sustainability as a project of ecopraxis can facilitate the necessary ecological restructuring, while avoiding the pitfalls of revolutionary change, is a relevant consideration. The further question of whether sustainability can rejuvenate the political economy of liberal democracy, in the face of severe legitimacy problems, is similarly germane.

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structures, values and relationships, and to keep theory and practice in appropriate tension.

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List of Abbreviations

EM Ecological Modernization

ER Ecological Restructuring

MSR Mode of Social Regulation

INTRODUCTION

The second half of the twentieth century has been witness to significant decline in environmental quality and rising social crisis and it would appear that the foundational values and institutions of liberal democratic capitalism have reached the limits of their capacity to respond to what are apparently insurmountable and increasingly complex issues. These include most notably global warming, biodiversity loss, and increasing disparities of wealth, reflected in urban decay, food and water shortages, entrenched unemployment even in the richest nations, fundamentalism, and youth alienation and suicide. A parallel can be drawn between the apparent helplessness and impotence of liberal institutions in the late twentieth century and the period of general social crisis in the seventeenth and eighteenth centuries. This, too, was an era that demanded a revolution in values, in systems of knowledge, and in organizing institutions, when it seemed to the innovative thinkers of the day, the *philosophes*, that existing modes of understanding and organization were at a loss to respond to the kinds of dilemmas and questions then being raised.

The purposes for drawing this parallel are severalfold. Firstly, an excavation of the circumstantial origins of the body of theory and the institutional framework that is the legacy of that era, and which our era currently relies upon to organize social, political and economic life, explains in large measure the constitution of existing value systems and institutions. It explains why early liberals opted for institutions and values which provided them with certainty and stability and therefore the attractiveness of world-views based around the metaphor of the machine. And consequently, it also serves as an explanation for their impotence in the face of issues characterized by complexity, uncertainty, interconnectedness, circular feedback, and rapid change.

Against this background, the general objective of this current research is to theorize more environmentally benign modes of existence and the transition thereto. Accordingly, the thesis consists of two parts. The first investigates the legacy of the Enlightenment, its hopes and ideals and their subsequent incomplete fulfillment; it traces the development of some of the principal organizing institutions of modern life - the public sphere, the economic sphere and the self-regulating market, and private property - from their origins to the present day. There are very specific reasons for selecting these institutions and ignoring others. In line with my objective of theorizing the transition, it appears that the emergence of the new social movements and their attempts to reclaim the public sphere of civil society, which has become almost synonymous with the state, holds the most promise in this respect. Moreover,

the monolithic structure of the state apparently precludes radical internal change and in the new social movements lies the considerable promise of a countervailing focus of power. While green movements have received adequate treatment in green literature, the same cannot be said of the ethical foundations of the economic sphere or of property rights. Environmental theorists have recognized that economics cannot remain ethically neutral, but the necessary theorizing is still at a rudimentary stage. I attempt to set out the elements of a responsible economics and to assess the ethical claims of sustainable development strategies. Further, despite the centrality of private property rights in liberal capitalism, little systematic attention has been applied to them in green political economy. I attempt to remedy this deficiency, drawing on recent feminist contributions to moral theory in order to develop an ethical foundation grounded in responsibility and care.

The reason for an archaeological approach is to better grasp the realities of contemporary life and to erect a sound basis for arguments for the obsolescence of the orthodoxies of modern life and hence the need for their transcendence either through reformulation or abandonment, to be able to demonstrate that conditions which obtained in the eighteenth century are not those that obtain now and that world-views grounded in certainty and stability and underpinned by mechanistic metaphors are inadequate for the conditions outlined above. The present crises require world-views favouring contextual and organic metaphors.

The second part of this thesis attempts to tackle the most elusive and difficult task facing theorists of matters ecological - the question of *praxis*, of the transition from seeming impotence to an ecologically sound or responsible future. The explanation for the difficulty rests largely in the reluctance of present generations to give up on the certainty-providing thought frameworks and their complementary institutional arrangements. What mainly seems to be missing is the sense of common purpose that is necessary to confront the difficult and complex issues of ecological sustainability and global social justice. A sense of common purpose and a viable public politics are prerequisites for a satisfactory response to these problems, for it is my view that neither ecological sustainability nor socioeconomic sustainability are possible without substantial material sacrifices from the world's materially privileged peoples. It will be argued that as long as liberal democracy adheres to a radical individualist ontology, it will fail to marshall either the theoretical or practical resources to generate the necessary common purpose.

My approach in bringing understanding to contemporary problems is to utilize contextual and organicist metaphors. That this is a valid course is confirmed by the work of Anne Buttimer and her attempt to make sense of western history and its emancipatory moments. To facilitate a better understanding of western humanity's experience of the world, Buttimer (1993) distinguishes four world-views or metaphorical interpretations, namely, formism, mechanism, organicism and contextualism. Briefly explained, formistic or mosaic metaphors are concerned with pattern and rhythm; mechanistic metaphors are analytic and concerned with the qualities of things and the laws governing qualities and causes; organicist metaphors are to do with wholeness, connection and synthesis; while contextual metaphors explain the context of events, uniqueness, holism of particular events, and, like organicist metaphors, are synthetic and geared to change. It is the mechanistic metaphors which have predominated throughout modernity (with other metaphors emerging for brief interludes) and which structure modern institutional arrangements for stability and containment. These mechanistic structures block the transition to the theorizing and practice of more ecologically responsible modes of dwelling and underlie the apparent malaise of western thought.

A contextual metaphorical vision is appropriate for a time when the old certainties lose their power to explain the world as it is (Buttimer, 1993, 206). Interest in events-in-context arises when accepted truths lose their explanatory power and life becomes suffused with uncertainty. The utility of a contextual view is in its scepticism about universal theories (Buttimer, 1993, 189), which means firstly, that the contextualist is more concerned with the practical relevance of truth-claims to everyday life and to problem-solving, and secondly, that it is modest about the limitations of human knowledge and understanding. In this respect, contextualism follows in the Socratic tradition, which, as I shall discuss, was expressed later in western intellectual history in the work of late Renaissance humanists like Michel de Montaigne and in philosophers of the Scottish Enlightenment, such as David Hume and Adam Smith. I maintain that the tradition of modest scepticism furnishes environmental theorists sufficient scope for an intellectual stance that could prove an antidote to the Faustian structures of mechanistic modernity.

As the contextualist has an instrumental approach to truth, he/she is not wedded to a single tradition of theory but rather is eclectic in selecting those branches of thought which apparently hold the most salience for problem solution. Accordingly, my research work will range across a number of different disciplines and traditions of thought in an effort to bring critical understanding to the crises of

modern life. Most particularly, this is the case in Part II, where I enlist the *praxis* paradigm in order to develop an ecopraxis oriented to the transcendence of established thought and practice. The notion of *praxis* has been particularly useful at times of crisis in human affairs, because it offers a framework of thought that can furnish critical understanding and a means to transcend obsolescent and intractable orthodoxies. I have also drawn upon regulation theory for its explanatory power in the matter of the durability of a seemingly crisis-prone system of production, namely, capitalism. And similarly, I engage the social learning paradigm for its insights into human learning processes and because periods of rapid change and crisis demand ongoing learning.

It is the function of the contextualist to bring critical understanding to the paradoxes and contradictions of taken-for-granted ways of thought through revealing the context-sensitiveness of truth. Myth has been recognized as one particular avenue for reaching such understanding. In this context, Buttimer argues that the mythical figure who is best able to critically evaluate the established traditions of thought and action and who best symbolises reflective, critical moments in intellectual history is Narcissus. A visit to the Pool of Hippocrene may have either of two outcomes. A conservative response will reaffirm the *status quo*, as has been the case with ultra-right fundamentalists left behind by the rapid technological and social change of the last several decades. A progressive response will result from "insight into all the processes that led to the present malaise, a better understanding of history and the drama of events and their contexts. From this, Narcissus may emerge ready to shed the harness of routine ways and to pave the way for fresh alternatives" (Buttimer, 1993, 45).

Western societies have, as yet, been unable to accept the need to transcend the old certainties of modernity. As a critical movement, postmodern deconstruction has, for the most part, served only to promote despair and to sharpen the "sense of the absence of creativity and hope" (Buttimer, 1993, 71). It has failed so far to do as the *philosophes* of the Enlightenment did, and that is to furnish the means of proceeding on, of transcending the mechanistic frameworks of thought and practice and hence of overcoming the western malaise. It is my belief that environmental thought provides the necessary hope and could furnish the means of proceeding further.

A transcendent Narcissus points to neglected dimensions of human existence, criticizing the hegemony of currently valorized dimensions. Thus ecological theorists are critical of modern society and its institutions for their preoccupation

with instrumental-bureaucratic rationality, lamenting how these forms have come to dominate and, indeed, to devalue life itself. Complicit with instrumentalism in the suppression of life is that narrow understanding of human potential by which politics is made subservient to economics and by which humankind's primary functions are strictly confined to producer/consumer, namely, economism. The outcome of this unfavourable alliance is that the relations between social and cultural life and the biophysical environment have become patently dysfunctional. I seek in this thesis to further this critique and to recover alternative traditions within western thought, which have been side-tracked by the mechanistic juggernaut. Most particularly I seek to rescue that tradition of modest scepticism about the claims made for reason and abstract thought in the tradition exemplified by Montaigne, whose brand of reasonable thought was unfortunately shunted aside in the urgent need for order and certainty in the early modern period.

Contextual analysis sanctions the convergence of theories of being (ontology) with theories of knowledge (epistemology), as they do in the recursive learning modes of the social learning paradigm. For too long, theory has been abstracted from living reality in western reductionist modes of knowing and being, a deficiency which ecological theorists have endeavoured to remedy by fitting new insights from evolutionary biology to accepted theories of human society, thereby exposing the shaky foundations of existing frameworks of understanding. In so doing they emphasise the tentative and fallible nature of theory that is not tied to reality. My approach has been to work backwards from the realities of ecological and social crises and to cast around for explanatory frameworks which best fit the reality and which also furnish a means or, at least, an understanding that facilitates the means, of proceeding further. The approach is both eclectic and synthetic, having as its objective a salient contribution to understanding the preconditions for an ecologically responsible society.

An understanding of events, places and problems in context is important for the critical insights that it may afford, by creating awareness of the differentials between spirit and letter, and of the contradictions of entrenched orthodoxies and unwieldy structures. The now routine ways of thinking and being have to be replaced by modes of dwelling more appropriate to a rapidly expanding human population, an explosion of information and communication, rising wealth disparities and global environmental decline. I argue that the as-yet-Faustian response to ecological problems - technical and procedural innovation, energy and resource use efficiencies - is unlikely to generate the necessary ameliorative action, since the reductive,

mechanistic approach to problem-solving results in fragmentation rather than unity of action. This response cannot generate the new levels of understanding that humanity and the planet need to construct alternative ecologically sound ways of dwelling.

Moreover, while contextual metaphors help to explain the world as it is and how it came to be that way, to transcend established modes of thinking and being, which have only served to sunder relationships between humanity and its environment, necessitates the use of metaphors that express the wholeness of human-nature interaction. Such organicist metaphors, Buttimer (1993, 158) observes, are characterized by four concerns; firstly, a concern for wholes rather than parts and for the "coherence and unity of reality" (Buttimer, 1993, 167); secondly, a concern for understanding dynamism and dialectical change; thirdly, a concern for transcendence, for the "processes leading to higher levels of complexity and unity where previous contradictions could be resolved in higher-order integrations of reality"; and fourthly, a conviction that humanness cannot be understood simply in terms of material processes, but that transcendent elements, like spirituality, are also part of its essence.

Throughout western intellectual history, organicist metaphors have come into play when there was a need to reassert the wholeness of being, when the need arose to transcend fragmentary ways of knowing and being and to ascend to a more unified mode of dwelling. Organicism allies itself well with the symbolic figure of the Phoenix, with its emancipatory and pioneering spirit, when humans seek to leave behind the ruins of obsolescent dwelling modes and reach higher integrations of understanding, being and becoming. It is for these reasons that organicist metaphors are particularly congenial to environmentalist emancipatory thought in its challenge to the rationalistic dogmatism of scientific reductionism, economic liberalism, and bureaucratic containment. The emancipatory relationship between organicism and the spirit of the Phoenix has thus been useful "at times and places when a liberation song about the integrity of life was called for - that is, whenever certain dimensions of experience, such as the social, intellectual, material, or spiritual aspects of human life, were ignored, oppressed, misconstrued, or simply forgotten" (Buttimer, 1993, 158).

While contextualism and Narcissus expose the contradictoriness of established patterns of thought and action, organicism allied with the spirit of the Phoenix furnishes the means for their creative transcendence. The creative possibility of the organic metaphor rests in its openness to paradoxical logic (rather than the analytic logic of mechanistic metaphor) and a synthetic approach to reality.

However, unlike contextualism, which is dispersive in its synthesis, that is, where particular events, places and periods are put in their overall context, organicism is integrative, that is, it seeks to integrate diverse components into an organic whole. Truth thus proceeds by means of an integrative process, resolving itself into an integration constituting a "higher level synthesis, which recognizes the claims of all fragments, transcends them and harmonizes them into a richer and more concrete whole" (Buttimer, 1993, 172). Creative potential lies in the conflicting interplay between diverse forces.

Consequently, in the context of harnessing the Phoenix spirit and organicist dialectical synthesis, Part II endeavours to advance understanding of the processes and conditions of creative transcendence, to discern zones of dissonance for their potential as sites of innovation, while integrating insights from different thought paradigms and bringing them to bear on the problems of and prospects for sustainability. The *praxis* paradigm is enlisted for the understanding it elicits concerning the impediments to human creativity and autonomous action in addition to the conditions necessary for autonomous flourishing. Its attractiveness is that it shifts the focus of intellectual endeavour and creative action from liberty and rights to autonomy and the conditions for human flourishing, which are pre-eminently sustainability concerns. Based on the intellectual contributions to the paradigm and from its historical practice, I develop guidelines for a programme of radical ecopraxis oriented to sustainability. Within the parameters thus set, an assessment is made of the capacity of sustainability to rejuvenate liberal democracy and to augment its capacity to respond to ecological problems. The ecocentric critique is used to elevate liberal democracy's encounter with sustainability to a more fruitful plane of understanding with respect to its possibilities and deficiencies.

For environmentalists, organicist metaphors disclose previously occluded realms of thought just as they did for the visionaries of the Renaissance. Indeed there are distinct parallels between our own era and that earlier period of creative flourishing in the fifteenth century. Like our own time, that was an era of expanded horizons of space and time through the great explorations and advances in cosmological and astronomical understanding, just as the twentieth century has been characterized by the compression of space and time, the conquest of extraterrestrial space and innovations in the understanding of matter. Similarly, the invention of print made communication easier and facilitated accessibility to new and different ideas, while discourse, once confined to Latin, was expanded to various vernaculars. These events are replicated in our time by the explosion of microtechnology and the

democratization of information via the Internet. In the fifteenth century the great explorations kindled new knowledges and new understandings, which challenged existing orthodoxies and undermined established ecclesiastical authority. In the twentieth century new insights in ecology and evolutionary biology are challenging existing orthodoxies concerning the competitive nature of species and hence notions like 'survival of the fittest', which ground business ethics and social provision. It may not be too farfetched to argue that the unlocking of the Roman Church's hegemony by the Reformation of the Christian Church has a parallel in the emerging resistance of local elements to global capitalism's hegemony over the planet's economic and social systems. On the evidence, then, the twenty-first century has the potential to be a moment of creative discovery and to recover those qualities of humanness suppressed by the hegemony of capitalist economics.

Sustainability is a concept which has apparently broad if ambiguous support, and is a possible harbinger of such a creative, emancipatory moment, serving as a bridge between a human-centred modernity and an ecocentric "postmodernity". However, this will only be the case where it is adopted in its full normative sense. Sustainability, as a political-ethical concept, is to be distinguished from sustainable development, which refers to the simultaneous maintenance of economic growth and a non-deteriorating stock of natural capital. As Barry (1996, 117) points out, "[s]ustainability, unlike sustainable development, is concerned as much with the ends of our use of the environment as with the ecological means to economic development". Sustainability should set the parameters of sustainable economic development, the objectives of which should be broadly compatible with the need to ensure ecological sustainability and sound human development. *In nuce*, this thesis will argue that there are radical implications for the distribution of power and responsibility in liberal democracies if the justice due to nonhuman entities and future generations is routinely taken into account in political and economic decision-making.

PART I:

ON THE SUSTAINABILITY OF MODERNITY, ITS ETHICAL FOUNDATIONS AND ITS INSTITUTIONS

CHAPTER 1

MODERNITY: PATHS TO ENLIGHTENMENT

1.1: Introduction

In this chapter, I explore the legacy of the Enlightenment, its hopes and subsequent distortions to its ideals, institutional failure, and the inadequacy and pathology of modern society, including crisis, nihilism, and the loss of norms and values. In reference to the latter, responsibility constitutes a major theme of the thesis and consequently I research modern ethical and moral systems in some detail, particularly the emancipation from responsibility which characterises modern modes of organising life. The early moderns' search for certainty and freedom from moral anxiety has had the perverse effect of creating a theoretical, institutional and ideological framework of "organised irresponsibility" (Beck, 1995a), which now threatens existence itself and reveals the search for certainty as an illusion. In this respect the loss of certainty, once guaranteed by modern science, and its corollary, the return of ambivalence, are seen as necessary steps in the reinstatement of responsibility to ethical considerations and thus in the search for sustainable human existences.

There is some dispute as to whether modern society is a rationally created one, that it was not a project at all, but rather was conceived in the breach as it were (Bauman, 1995, 106). One might argue, as does Stephen Toulmin (1990), that the uncertainty-generating experience of the Religious Wars of 1618-1648 had a most profound effect on the philosophical discussions of the ensuing century and a half. Toulmin explains the search for a rational social order as a direct result of a half century of religious and political crisis and turmoil, of social disorder and economic retreat, and of intellectual and spiritual decline, culminating in "the breakdown of public confidence in the older cosmopolitical order" (Toulmin, 1990, 71). The work of Descartes, Newton and Leibniz was then a response to the urgent need for rational certainty devoid of religious divisiveness, to the urgent practical needs of the time. And like the *philosophes* of early modern Europe, my research programme is oriented to the urgent tasks of a social order in decline, of a modernity that in hindsight, it may be argued, took a wrong turning on the journey to enlightenment.

1.2: The Enlightenment

To understand the course taken by modernity we must know something about its origins and the conditions under which the modern social order was conceived, for hopefully we may avoid repeating what appear now to have been erroneous judgements. I have, for the most part, relied on the account by Peter Gay (1973) for an understanding of the Enlightenment, of its ideals and of the *philosophes* who promoted those ideals. The novelty of their thought is set against a backdrop of repression and the arbitrary exercise of power, of wretched living conditions, of ascetic and all-powerful religions, and of a miserable historical fatalism. It is the experience of the eighteenth century which makes their thought that much more revolutionary and novel. It was an age of improvement[1], of innovation, of emerging confidence in the capacity of man. Gay (1973) describes the experience as "a recovery of nerve", of the recovery of the self-confidence lost with the asceticism, mysticism and pessimism of the Christian era.

Historical fatalism had been broken by Bacon in the previous century and the Age of Enlightenment became an all-out attack on established religion and autocracy and the misery that was their consequence. Science and knowledge would be used to improve the lot of mankind, since, for Descartes, the preservation of health was the foundation of all the other goods of life. However the application of reason to the many spheres of life was not without its side-effects and was of doubtful benefit to many (Gay, 1973, 6). Economic improvement, for example, was not without its miseries. The enclosures, although in the long-run resulting in improvements in agricultural production, meant the interim displacement of the landless peasantry and all its attendant evils. Despite the upheavals, though

> men saw life getting better, safer, easier, healthier, more predictable ... - decade by decade, and so they built their hopes less on what had happened than on what was happening, and even more on what they had good reason to expect would happen (Gay, 1973, 12).

On science and rationality in particular were heaped the expectations of the age. Not only would rationality provide the antidote of certainty and predictability to the "pitiless cycles" (Gay, 1973, 3), allowing man to be the "architect of his own life

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[1]Plumb (1982, 332) notes that "improvement" was the watchword of the eighteenth century, used *ad nauseam* for all areas of human endeavour. It is interesting to note the parallel use of the words "development" and now "sustainability" in our own time.

and fortune" (quoting Shaftesbury, p.7), but it was seen as a weapon in the attack upon religion (Gay, 1973, 63). Some of the *philosophes*, like Diderot, expected that science should not only explain the physical dimension of nature but that it should also supply moral precepts. Science was to be the "bridge" between facts and values, with the possibility of science becoming the site of future values; thus natural philosophy might set the bounds of moral philosophy.

As well, scientific thinking was to be the model for all other kinds of thinking, for it was seen to be superior to any other kind of human knowledge system (Gay, 1973, 166). Theology and metaphysics could no longer provide the answers to the old questions of man's nature and man's place in nature, that is, "Who am I?" and "What must I do?" The answers to these questions were now sought and found in science. And what is more, the scientific method provided the progress and certainty which the dogmas of the theologians never could. Its principle appeal was in its "sheer magnificent effectiveness" (Gay, 1973, 164).

The hope expressed by Hume and others was that objective knowledge would serve human ends with "abundance and freedom" (Gay, 1973, 166). However, it has been the very realisation of abundance and the peculiar construction of freedom over the ensuing centuries that has served to repress these timeless questions until recently when they have resurfaced courtesy of global and personal crises. But, whereas the questions that confronted the scientists and philosophers of the Enlightenment were questions concerned with the relationship between man and the natural world and man and society, now they are to do with the relationship between society and nature. Once again our values, our knowledge systems and our institutional order are being called into question because we are losing confidence in their practical efficacy.

Unlike the eighteenth century, however, it is not pessimism and lack of confidence that bedevils our existence, but rather overconfidence and hubris with respect to our technological capacity that brings us to the point of self-immolation and, some would argue, demands a renewal of enlightenment (Beck, 1995b). The iconic statement for an ecologically sound social transformation might be one of modest optimism, along the lines of *vivereamus sapienter* (let us enjoy life wisely) rather than the overconfident Cartesian *cogito ergo sum.*

1.3: The Legacy of the Enlightenment

The function of the *philosophes* was to raise fundamental questions about the relationship between man and society. They enquired into all the institutions of state and society, of religion and of the Church and subjected them to the tests of natural utility and the pleasure-pain principle for their satisfaction of the needs of man. The attack on religion and its dogmatism, on the divine right of monarchy, and on superstition and ignorance undermined the institutions of church and monarchy with the result that theology and metaphysics were overtaken by secular philosophy. Most particularly it was the doctrine of 'original sin' on which they set their sights, for it was that which was the straitjacket that committed people to accept suffering and evil and sustained absolute obedience to church and state (Manuel, 1965, 4). The new secular philosophy emphasised humanity and equality and was responsible for the "rehabilitation of the passions" (Manuel, 1965, 192), which Christian theology considered mortal sins. But the passions were more problematic for the *philosophes*. Pride, for example, could be both malevolent or beneficent. It was pride as self-confidence which was an essential virtue for the enlightened man. The recovery of pride reflected the spirit of the age and the new-found confidence in the mastery of nature.

In applying reason to the whole gamut of human affairs, the *philosophes* expected that human affairs would progress, economically, socially, morally and politically. Thus reason as reasonableness was synonymous with humanity and signalled a move away from brutality and aggression. In turn the spread of humanity was intimately linked to the expansion of commerce. Indeed, the restless activity and industriousness of the new bourgeoisie was considered a virtue (Manuel, 1965, 45) with the result that commerce and its merchants were assigned a high social value for their usefulness in shifting the energies of men away from the making of war and desolation (Manuel, 1965, 51).

In attacking the state, the *philosophes* were concerned with freedom of the individual from arbitrary power, with equality and with justice. They took on the judicial system and customary law, condemning particularly the cruelty and irrationality of punishment as contrary to the natural rights of man (Manuel, 1965, 11). In pushing for political reform, their principal concern was with the right of equality before the law regardless of birth and with the application of equal justice.

As a corollary to the pursuit of equality and justice, the political sphere was to be the sphere in which legitimate authority was exercised and public happiness generated.

They dissected feudal law and denounced its customary elements, which blocked geographical mobility, stifled free expression and prevented freedom of occupation, while property ownership was enmeshed in a web of feudal dependencies with no social relevance. They demanded reform of these institutional hangovers as well as economic freedom from guild and dynastic prohibitions. Thus each individual looking after his own interests would contribute to the general economic interest (Manuel, 1965, 12).

In the sphere of production and trade, criticism was aimed at the long-held doctrine that the sovereign's interest was tantamount to the general interest. The position of the theorists was of course inimical to the interests of the mercantilists for whom power was more important then wealth. For the economists of the Enlightenment, by contrast, wealth came before power and its distribution was as equally important. The classical economists, such as Hume and Smith, argued the advantages of a flourishing economy, maintaining that such a situation benefited the poor while augmenting the power of the sovereign (Gay, 1973, 356). They argued that it was economically irrational to allow radical inequality for the rich are then tempted to oppress the poor and such a state of affairs is uneconomic. Rather, general prosperity increases the proportion of the middle-classes, a development which is conducive to public order.

1.4: Distortion and Disillusionment

The ideals of the Enlightenment *philosophes* were not necessarily fulfilled in the way that they would have hoped. Some have been carried to their logical conclusion in the absence of a guiding moral framework; some have become distorted and debased; while others remain unrealised. In the first instance I have in mind individual rights and the cult of individualism that, together with the doctrine of self-interest, is now a threat to our collective existence, as I shall discuss in Chapters 3 and 4. In the second instance, the notion that the wealth which society produced was for the good of all was quickly debased such that even by the early nineteenth century the production of wealth had become an end in itself and remains so (Sismondi, 1819[1991]). Similarly the work ethic engendered by the industriousness of the early bourgeoisie has deteriorated in this century to "workaholicism". The situation now prevails where a disproportionate amount of the available work is

executed by a professional elite labouring abnormally long hours accompanied by underemployment or unemployment among an increasingly larger section of the working population.

Moreover, the fortunes of the middle-classes, the standard-bearers of the hopes of the *philosophes*, are in relative decline. The resurrection of an individualist and competitive politics drawing on early classical liberalism has had as its consequence widening inequalities between the richest and poorest sections of western societies with many former middle-class adherents now falling into the category of the "working poor". The permanently unemployed and underemployed, a category which includes many young people, constitute a developing and recognisable underclass. These developments fuel disillusionment with mainstream political parties and contribute to the emergence of fundamentalist and other ultra-right wing political groups.

Thus, while continuous economic growth could obscure inequalities within society with the promise of better things to come, the falling growth rates of recent decades with their attendant cutbacks in social welfare compensation have exposed the soft underbelly of modern economic societies. Similarly, those existential questions about the society/nature relationship, long repressed by the doctrines of individualism and abundance, now re-emerge, as the side-effects of this existential vacation become manifest.

1.5: Enlightenment Ideals: An Evaluation

1.5.1: The Reasonableness of Rationality

Disillusionment with the legacy of the Enlightenment among twentieth century thinkers has for the most part focussed on rationality[2], specifically the application of reason in the scientific method, and more generally on progress through the application of reason to all the spheres of human affairs. The literature is voluminous and I can only cover some of the most salient and critical points. Of the critical assessments of modern rationality, that of Max Weber is very much in the Enlightenment tradition, where the modernisation process is a process of progressive rationalisation and the process of history is progress towards reason (Wellmer, 1985, 40). However it is a qualified process of rationalisation, which is both a source of

[2]In the context of this and subsequent discussion a distinction needs to be made between rationality and reason as critical thought.

emancipation and of reification. In the first sense, rationality allows for increases in economic and administrative efficiency and also brings order and coherence to the general chaos of multiple beliefs, values, experiences, choices, opportunities for action and so on. But it also signifies disenchantment or de-sacralization of the natural and social worlds, even as it makes for better understanding through the application of scientific objectivity.

Weber's assessment of modernisation in its capitalist guise was a pessimistic one and from his analysis of the institutions of the capitalist order he concluded that the systems of capitalist economy, bureaucracy and objectivist science would most likely result in the imprisonment of the modern individual in the "iron cage" of bureaucratic order rather than their emancipation. The autonomous individual is thus a myth with meaningful life choices being degraded to a "pluralism of privatised value choices" (Wellmer, 1985, 41). Life would become increasingly more reified, bureaucratized and depersonalized.

The darkest assessment of Enlightenment rationality is undoubtedly that of Adorno and Horkheimer (1944[1972]) and the Frankfurt School, no doubt coloured by the fact that they wrote in the darkest days of German Nazism. For the German philosophers truth and knowledge inevitably implied the domination of nature and of men, for knowledge and power are synonymous (Adorno and Horkheimer, 1944[1972], 4). Although the Enlightenment rid the world of superstition and myth, it simply replaced one mythology with another, science. Just as earlier myths were a way of explaining the world, so was science, but whereas mythology was the realm of the sacred in pre-Enlightenment times, "in the enlightened world, mythology has entered the world of the profane" (Adorno and Horkheimer, 1944[1972], 24, 28). Adorno and Horkheimer further criticised the objectifying tendencies of science, in which the whole of human existence is reduced to computation and equivalence. "Myth turns into enlightenment, and nature into more objectivity" (Adorno and Horkheimer, 1944[1972], 9). Objectification and domination are of a piece.

In this respect the Adorno-Horkheimer critique of Enlightenment reason is close to Michel Foucault's genealogy of power/knowledge. Indeed, as McCarthy (1990) points out, Foucault's radical critique of reason is not too far removed from that of one of the principal disciples of the Frankfurt School, Jürgen Habermas. The latter's "colonization of the life world" by which he describes the increasing intrusion of instrumental and strategic rationalities via the forces of the market and government administration ("monetization" and "bureaucratization") into other spheres of life

could be thought of as one side of the critique of reason. Foucault's notion of the disciplinary society is effectively a critique of the failure to pursue a life informed by reason "by developing and institutionalizing modalities other than the subject-centred, instrumental ones that increasingly shape our lives" (McCarthy, 1990, 444). Thus, while Habermas laments the overdevelopment of instrumental rationality, Foucault deplores the failure to develop and nurture other forms of reason.

However it was in fact Habermas who went on to expand on the unutilized potential of rationality, reasoning that, as the lifeworld is conditioned less by traditional understandings and is opened up further to "modern structures of consciousness" (White, 1988, 97), not only are individuals more instrumentally rational in their behaviour but this modernization process opens up opportunities for communicatively rational behaviour. Hence, "these same developments also enable discursive and critical reconstruction of the life world. Subjects can coordinate their actions through talk rather than unthinking compliance with norms, and it is through talk that an attack can be launched against instrumentalization".

The development of communicative rationality has been undertaken by John Dryzek, who has enlarged on the consequences of the dominance and pervasiveness of instrumental rationality in modern societies. But, whereas Habermas envisaged communicative rationality as, firstly, freeing the life world from myth, custom and illusion, and secondly, as a defence against the objectifying and instrumentally rational incursions of experts and administrators (Habermas, 1987), Dryzek (1990, 20) proposes extending discursive rationality into both system and life world as a "counter-offensive". He argues that instrumental and communicative rationalities are not incompatible, that they should co-exist; it is rather a question of the balance between the two. In the real world political sphere the potential for communicative rationalization is being realized by various agents of democratic renewal, including social movements and voluntary associations seeking the defence of locality and culture. Environmental movements, in particular, are in the vanguard of democratic renewal and the reorientation of politics towards public interests, thus endeavouring to reappropriate the unutilized rational potential of modernity, beginning the dissolution of the bars of the "iron cage" as it were. As Habermas maintained, the communicative model would provide the "critical foothold" for determining the rational potential of modernity (White, 1988, 118).

Habermas and Dryzek are representative of those who remain committed to the modernity project. There are however others who, at the end of the twentieth

century, are pessimistic and cynical about the fulfillment of the Enlightenment's goals. Particularly among the French structuralist and post-structuralist writers, whose critiques of the rational project expose its irrationalism or unreason, reason is considered the source of a number of delusions (Racevskis, 1993, 4). Their writings on reason are largely concerned with relationships of power in society. They maintain that the use of reason as rationality has not produced progress as promised and that reason which replaced divine revelation as a transcendental authority is simply another form of the same; that the modern subject who should be in control is in fact controlled (Racevskis, 1993, 9, 11). The postmodern critique of reason is encapsulated thus:

> Reason, we now realize, could never be the universal and objective interpreter of reality that a traditional representation of the Enlightenment once proposed. What was forgotten in the wake of the enthusiasm generated by the Enlightenment was that reason always needs the support of the relations of power and institutions it has created. Thus, the ideals promoted by the Enlightenment were from the start liable to be co-opted by socio-economic interests and reason could become the prerogative of a class, race, gender, or a nation - that is, of a clearly circumscribed area of political or economic interests that sought to promote its own aims as those of an eternal and essential humanity.

And further:

> The ultimate goal of enlightened reason, which was to make society in some way transparent to itself, is thus revealed to have been the ultimate illusion. What has taken us to this impasse is the failure to account for power - the crucial element complementing and competing with reason. Reason was incapable of guaranteeing the integrity of the Enlightenment project because it had no hold over the workings of power (Racevskis, 1993, 65-66).

What Foucault and the other postmoderns have done is to problematize the faith in reason and the power relations which accompany truth-claims just as the *philosophes* problematized religious dogma and superstition as transcendental truth.

1.5.2: The Progress of Progress

From the beginning of the modern era, the notion that social and moral progress would follow from material and technical/scientific progress has had its critics and crises of belief. Even the strongest supporters of Enlightenment ideals, such as Rousseau, were deeply ambivalent about its consequences. The Romantic

movement of the nineteenth century was simply the reactionary high point of the criticism of the chain of consequences set off by the French Revolution. Other critics were deeply pessimistic. Marx, for example, in interpreting the realities of capitalism, had rendered the progress of history as "a permanent struggle involving class and power" (Joas, 1990, 182); while Nietzsche, the most radical and pessimistic critic of progress, envisaged history as "a continuum of meaningless struggles" (Joas, 1990, 184).

The belief in progess was further battered by the crises consequent on the global conflagrations and economic depressions of the first half of the twentieth century. But in the years after 1945, the notion of progress made a recovery. This time it was very clearly interpreted as "development", that is, economic growth through technological progress. Development was the process of implementing the belief in progress. It meant the development of better technologies for controlling and exploiting nature, thus to improve living conditions (Norgaard, 1994, 58). The opportunities for development which arose in this period were accompanied by expansion in scientific and technical know-how, and by the acceptance that government intervention through social and economic planning might eventually solve the problems that bedevilled the early part of the century. There was an optimistic belief that economic growth would support social progress, a belief strengthened by the very real improvements in living standards experienced by many, at least in western democracies.

The faith in progress, although still the dominant ideology for political and economic elites, began to unravel in the 1970s with the resource crises, although for many in the "developing" world it remains the ideology of exploitation and domination. The diseconomies of progress for late twentieth century societies have been documented by Schroyer (1983). On the global scale, he cites the ecological costs of the "logic of simplification that is being imposed on the organic complexity of global ecosystems by the encompassing power of the international technoeconomic system" (Schroyer, 1983, 168). As a result the less developed countries of South America, Central America, Africa, India, and Asia are suffering ecological decline through deforestation, overgrazing, desertification, salinization, and loss of biodiversity through destruction of habitat, all in the name of development sanctioned and encouraged by international monetary and credit agencies in the service of capital accumulation. Allied with ecological costs are social and other costs - the costs of social conflict resulting from the maldistribution

of environmental bads and inequalities in the distribution of natural resources and the knowledge and technology to develop them (Schroyer, 1983, 169).

The slow-down in the process of capital accumulation, which coincided with the end of the postwar boom, has necessitated alternative strategies to maintain profit levels. Thus capital has tended to centralize in core centres, shifting away from more marginal economies, often abandoning them to conditions of severe depression, or it has moved offshore to low-wage "developing" economies. The last several decades in the cycle of capital accumulation have therefore been marked by high unemployment, factory closures, reductions in government services, and other hidden costs of development, such as "ever-widening consumerism", the need for extended periods of education in order to gain and retain employment, and the lengthening periods of capital accumulation required for the "capital-intensive household" (Schroyer, 1983, 170). Articulating these hidden costs has the further effect of unveiling hidden dominations, mainly resulting from the homogenizing effects of western technologies (Norgaard, 1994, 58-60; Schroyer, 1983, 169-170).

The "dwindling faith in progress", Norgaard (1994, 55) maintains, is responsible for much of the recent atomization and loss of meaning among western cultures. The belief in progress acted as a lubricant for the wheels of collective decision-making, but with the loss of faith in the notion, comes a loss of a collective sense of the future. This has implications for many spheres of life. Political groupings are more likely to take up entrenched positions, since no group is willing to make concessions on the basis that more opportunities will arise in the future. The outcome is political gridlock. As well, young people are less inclined to concentrate their efforts on study, when they lack a secure vision of the future. Yet, while some sections of society are alienated and their hopes unfulfilled, we remain addicted to technological innovation as a solution to the problems which confront us. Our faith in technology and science deludes us into postponing the necessary collective thinking processes until there is conclusive scientific proof, by which time the problems may be insuperable.

The original conception of progress, as moral progress through material wellbeing, has gradually lost its moral force. This combined with the secularization of society and the waning guidance of Christianity as a moral force left only individual action as the ground for moral direction. Lacking moral direction, the cult of the individual runs rampant and for many people on the treadmill of unending material consumption, progress and its attendant ideologies - individualism,

consumerism, the invisible hand, and positivism - has become a hollow conceit. Disenchantment is widespread. The motto of the age is: *consumo ergo sum.* Consumption becomes the compensation for the loss of communal identity - the loss of connection to kin, community and locale. Progress has been led astray by "liberal individualism, excessive emphasis on exchange relations, and globalization" (Norgaard, 1994, 123).

Aside from the descriptive treatments of the disillusions of progress, a systematic attempt to measure the actuality of human progress has been made using criteria of progress from evolutionary biology by Gowdy (1994). He challenges the arguments for human progress from the standpoints of (1) morphological complexity; (2) adaptive ability; (3) accumulation of genetic information; (4) increasing biomass; and (5) increasing resistance to extinction. On all five counts, he contends, we cannot sustain the idea of human progress. Firstly, we are becoming more genetically and culturally uniform; secondly, in spite of increasing technological complexity, our flexibility and adaptive capacity is declining as similar social systems founded on the same market mentality spread worldwide; thirdly, the development era has been marked by a dramatic loss of biodiversity and a loss of information of how to survive in the natural world; fourthly, the inordinate increases in population are in fact a threat to the survival of the species and are not an evolutionarily progressive step; and fifthly, our adaptive capacity comes increasingly to rely solely on technological advance, which has proved to be of doubtful benefit to much of humankind (Gowdy, 1994, 47-48; Norgaard, 1994, 57-58). Gowdy (1994, 55) concludes that on these criteria progress cannot be conceded; nor has the vehicle of progress, economic growth, produced "an unambiguous improvement in the human condition".

1.5.3: Freedom and Autonomy

For the *philosophes* of the Enlightenment, the progressive project had as its anticipated outcome "the fullest extension of human freedom" (Kumar, 1978[1986]). It was very much an emancipatory project. However, if autonomy is defined as the freedom to actualize one's human potentials, then the programme of the "technical transcendence of the earth" (Schroyer, 1983, 183), which constitutes the contemporary guise of progress, in effect constrains human potentials. What we have are negative freedoms, freedoms *from* rather than freedoms *to* or *for*.

Drawing on the Habermasian notion of communicative rationality, Schroyer (1983, 182-183) argues that societies progress not only through the application of rational science to their problems and therefore through technical learning, but also "in the opening of opportunities for discursive communication in all institutional contexts". Individual autonomy is limited by "systematically distorted communications", but because communicative rationality presupposes open, undistorted communication, then "a free society and an autonomous ego reciprocally presuppose each other" (Schroyer, 1983, 18). Discourse opens up those possibilities for freedom foreclosed and distorted by instrumental rationality and objectification.

The assumption that human emancipation is progressed by technical learning has as its side-effect the abstraction of technological problem-solving from its natural and cultural contexts. Thus any proposals which purport to serve human needs and therefore further human autonomy escape the critical purview of the discursive process, while their normative rightness and ecological fitness are rarely justified. Thus it is for Habermas (1985) that the democratic potential of the early liberal ideals remains to be fulfilled.

The early sense of progress embodied a complex and interconnected framework of meanings which have been gradually eroded as economic rationality assumed dominance. The idea of progress came more and more to be identified with economic progress. According to Carlo Mongardini (1990), this has the effect of culture being dominated by economic rationality and the enslavement of humans to the present. As economic rationality eroded the complex sense of progress, change became change for change's sake and thus a value in itself. Change is for appearance only with little substance, "a change in order to preserve the status quo, not a change in order to generate new and more adequate forms of society" (Mongardini, 1990, 56). Such is the 'cunning of modern reason' recognized by Hegel or the delusion of modern reason, referred to as such by postmodern critics. However, the ideology of change creates uncertainty and unease when people experience seemingly endless change with no apparent improvement in their life quality, thereby limiting the possibilities for a progressive collective existence. Fragmentation and alienation ensue and the only responses that abstract rationality can make are "primitive forms of fantasy, magic, regression, and negation of history" (Mongardini, 1990, 57). The pseudo-aesthetic fantasy, sensationalism, kitsch and historical fetishism of the arcade, of the spectacular event or of the museums of the past do not have the answers to cultural erosion, to the loss of values, meanings and ideals, and the loss of historical

reference points which were once embodied in the notion of progress as the process of human emancipation.

1.5.4: Justice and Equality[3]

The concept of equality has its roots in Athenian democracy and although it has a long history, its meaning has varied with prevailing political conditions. In the Greek polis, it bore two understandings: justice as fairness, and equality as sameness or homogeneity, although it did not mean that citizens were not free to cultivate their differences, nor that a degree of inequality between classes was untolerated. Rather equality involved the fairness of distribution of equal shares between equals and unequal shares between unequals (Lummis, 1992, 39).

The notion of a universal equality only came to apply when the need to consolidate a number of diverse peoples demanded some unifying formulation. Thus Alexander the Great and later the Romans adopted the Stoic idea of a common human nature as a basis for the governance of vast empires. So too the Christian view demanded that all peoples conceive of themselves as similar in their unworthiness, holding that they could only gain respect by belonging to the one universal religion, Christianity.

In the Middle Ages, equality was conceived as a characteristic of equal status, that is, among members of the same social class. Although in England there was a strong tradition of equality before the law (if not in actuality) and social equality was a strongly-held ideal among the lower classes, it did not become a significant political force as an ideal until the revolutions of the seventeenth and eighteenth centuries. Though it had different interpretations, the most important ones were grounded, not in social class, but in the human condition (Lummis, 1992, 41). The Levellers, for example, entertained a positive view of human nature, their definition emphasizing human correspondence, that each individual faced the same existential task of living a life (Lummis, 1992, 41). Hobbes, by way of contrast, saw people as equal in their weakness, and as a result their only choice was to submit to a sovereign power.

The evolution of the modern economic state has meant corresponding modifications in the notion of equality. While it retains its sense of equality as

[3]I treat the ideals of justice and equality as if of a piece since in modern life justice has largely come to be considered synonymously with economic equality.

justice in order to underwrite claims against racial, ethnic and gender discrimination, the understanding which now dominates is justice as economic equality. The prime vehicle touted for achieving economic justice in the postwar period is economic growth, interlinked with notions of economic development as social progress, both at national and international scales.

However, at the end of the twentieth century, the hopes for economic development remain unfulfilled; indeed they are receding as the gap between richest and poorest both within and between nations noticeably widens. The fact is that economic development under conditions where the accumulation of capital is the prime motivating force presupposes inequality (Smith, 1990). Justice has to be more than the roughly equal distribution of economic benefits. Not only does economic inequality have logical limits - a democratic society presupposes a rough economic equality among its citizenry (Spragens, 1990, 166) - but justice, as a number of feminist philosophers have demonstrated, cannot be reduced to distributive fairness (Young, 1990).

Marion Young's (1990, Ch.1) critique of the "distributive paradigm" exposes its preoccupation with outcomes (things, resources, income, wealth and social positions or jobs), a preoccupation which causes it to ignore the underlying social and institutional contexts producing distributional differentials. She argues that justice should not only turn on questions of the distribution of outcomes, but that, because it also concerns decision-making power and procedures, it should also turn on the provision of the means to develop and exercise human capacities or "functionings" (Sen, 1992, Ch.3). Accordingly, she contends that domination and oppression, the degree to which citizens are prevented from exercising capabilities, should be the starting point for theorizing about justice. It is in this respect that institutional contexts are relevant because "they condition people's ability to participate in determining their actions and their ability to develop and exercise their capacities" (Young, 1990, 22).

The critics of the post war drive towards global economic development (see for example Sachs, 1992 and Norgaard, 1994) have also taken the development paradigm to task for its deficiencies in producing equality, pointing to the inherent inequality and ultimate illogicality of a world economic system. Lummis (1992, 46-47), for example, points out that the world's peoples would need the resources of five planets to exist at the per capita energy consumption level of Los Angeles, so that the idea that all nations should aspire to that standard of material consumption and that,

in the context of resource depletion and global environmental decline, economic equality should be achieved by "levelling up", is mythical.

Thus just as Young divines the starting point of justice in the dominations and oppressions which prevent people from exercising capacities rather than in economic equality, so too do the development critics contend that equality is more a matter of "shaking off burdens", by which they mean those homogenizing tendencies of the world economic system with its one standard of wealth and wellbeing. It is a system which "dispossesses the world's peoples of their own indigenous notions of prosperity" (Lummis, 1992, 48) and therefore of social and economic diversity, thereby reducing capacities for resilience to external shocks. It is a system which creates inequality and dependence.

Following the resource depletion shocks of the 1970s and the obvious patchiness of world development, it was accepted that the need to conserve resources would impose limits on economic development. At the same time, critics of development were making specific links between expansive postwar economic development and a rapidly declining biosphere.[4] While "sustainable development" emerged as the preferred economic strategy, a broad constellation of understandings has crystallized around the notion, among which is an expanded meaning for justice. Justice, which has now assumed the novel context of ecological integrity, is extended to encompass not only global equity (not economic equality) between contemporary generations but also the maintenance of ecosystemic functioning for future generations. The notion of justice being due to the environment, of the right of all living beings to the conditions sufficient to fulfill their evolutionary potential, far transcends earlier understandings.

Our understanding of justice in the context of sustainability has benefitted from critiques of western notions of development and their ignorance of diverse perspectives on social and natural environments, and from criticism of Gross National Product as a measure of social wellbeing and the consequent need to invent broader measures of welfare and therefore justice if the needs of present and future generations are to be accommodated (Ekins and Max-Neef, 1992; Henderson, 1994). Feminist critics of development have also brought our attention to the male-centredness of development projects, the failure of the formal economy to account for the productive and reproductive activities of the informal sphere and the injustice

[4]For a comprehensive bibliographic list of economic growth and development critics, see Esteva (1992, 24-25) and Sachs (1992, 36-37).

suffered by women as a result (Harcourt, 1994). And yet, increasing dependence on the global trading system means continuing environmental and social decline for many in both 'developed' and 'developing' spheres and the foreclosure of evolutionary possibilities.

1.6: Pathology and Crisis

The decline of faith in progress has as its corollary the normalization of crisis. Crisis-talk results when there is no clear vision of the future or as Holton (1990) would describe it: "crisis becomes a more or less permanent condition [when there is no] clear sense of the possibility of new patterns" and the future is apparently foreclosed. One particular implication for later discussion of possible normative dimensions is that the sense of entrapment in the present encourages short-term time horizons. One response to a reluctance to begin the future is:

> short-run modes of crisis-management oriented to performance. The attraction of technocracy with this short-run perspective is that it defuturizes the future. This is achieved by reducing complexities associated with uncertain expectations about that which is to come. Technocracy seeks therefore to control surprise, and multiply short-run possibilities for maximizing performance. This leaves space for a symbiotic relationship between technocratic crisis-managers and private consumption-oriented households. Neither party has much stake in the future beyond tomorrow (Holton, 1990, 44).

The upshot of this phenomenon is a minimum of social integration and normative order as relations are to a greater extent mediated by "largely impersonal networks of communication and exchange, namely, the market and representative democracy" (Holton, 1990, 45). Moreover, this same symbiotic relationship erodes public politics and thus the "scope for social criticism".

Crisis has thus become an established feature on the political and social landscape[5]. More specific explanations for what appears to be a more or less permanent feature of late modern society are almost as various as producers of the explanations are numerous. Daniel Bell (1979, 480) explains the social tensions and conflicts of western society as a result of disjuncture between the spheres of social structure, polity and culture. The present is characterized by a lack of fit between the social (economic, occupational and technological systems) and the cultural. Victor

[5]Holton (1990, 49) cautions against representing the general dissatisfaction with modern life as crisis, because, in equating what is a condition of normalcy in modern life with crisis, we lose the capacity to differentiate between acute pathology and normalcy.

Toledo attributes the sense of crisis to the globalization of the human, which is the origin of our unease by obliging us to rethink all the spheres of human existence - "politics, economics, culture, diplomacy, education, and life styles" (Toledo, 1993, 34). The present crisis is therefore a crisis of civilization. Contiguous with processes of globalization is an increasing consciousness of a global ecological crisis, a growing awareness of biophysical limits, which obliges us to rethink not only the concrete present but also our past and our future (Toledo, 1993, 36).

Moscovici (1990) mounts a similar argument for a crisis of the social rather than a simple legitimacy crisis of the political. This is a crisis of the social in which nature replaces society as ideality. Such a development constitutes a new form of truth which will emerge as a response to "a collective desire for survival". In Moscovici's optimistic future, nature becomes an end in itself rather than a means to an end and the crisis consists in us coming to terms with this different vision of society.

> This new way of thinking will eventually sweep away the representation of society as an artificial order constituted in a breach with a disorderly and hostile nature, in which the anarchy of individuals must be reduced through the hierarchy of institutions. In this emerging vision, society will no longer be seen to shackle nature. Rather it will come into alliance with it, encouraging beliefs and practices which will tend to enrich the possibilities of the species and increase its prospects for survival (Moscovici, 1990, 8).

My own view is that we will begin to achieve and accept this vision of society only when there is general acceptance that western society was and is constituted in the breach, that its institutions are hostile to unsubdued nature and are necessarily defective in protecting the fundamental interest of all species, including human individuals, to develop autonomously.

The blame for the pathologies of the twentieth century has been laid on the doorstep of irrationality or unreason (Alexander, 1990). A counterintuitive argument has been mounted by Bauman (1989) who has used the horrors of the Holocaust to show how reason as instrumental and bureaucratic rationality can be employed to justify and perpetrate the most horrendous acts; in other words, the pathologies are a consequence of the exercise of reason. In this century the dream of reason, human emancipation through the application of reason, has been subverted by violence, fascist tyranny and war, thus revealing the dream as an illusion: "Alongside the

spread of rational understanding, there has emerged ... an outbreak of brutality and violence on an unprecedented scale" (Alexander, 1990, 25).

The irrationalities experienced by the modern individual can be said to derive from the unreasonable and incongruous conditions of modern existence (Benhabib, 1992, 80-81). Drawing on a Habermasian characterization of an underdeveloped lifeworld and its colonization by an overdeveloped strategic-instrumental rationality via the steering media of money and power, Benhabib suggests that the irrationalities of modern life result largely from truncated access to "an autonomous public sphere of political reasoning and discussion" and the consequent lack of opportunity to participate in "the consensual generation of principles to govern public life". The conditions of closure consist of: firstly, access to a sphere of political reasoning being denied to many on the basis of class, gender, race, age and religion; secondly, money and power coming to form the basis of the social bond rather than "the consensual generation of norms"; thirdly, as a result, individuals experiencing a loss of individual agency and efficacy, with political alienation, cynicism and anomie being the consequence; and fourthly, continous change and revision of traditions retarding the development of a coherent sense of self and community.

The twentieth century therefore is characterized by the spread of both rational understanding and by violence and antireason. Even those societies which escaped "the nightmare of reason [are] haunted by a sense of disappointment with modern life" (Alexander, 1990, 26), manifesting as the loss of the sense of individual and collective purpose and in attempts to escape from the demands and uncertainties of the modern world through addictions of divers kinds, mystic religions, and various brands of fundamentalism.[6] Ulrich Beck (1995a, 54-55) speaks of the hazards of an "overbred industrialism" and the anxieties and insecurities so generated, involving a "radicalized problematization of all the principles for guiding one's life". Thus the downside of modernity is "a collectively threatened existence mediated by the nature-society context, that modernity had promised under the aegis of autonomy, choice, individualism" (Beck, 1995a, 51).

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[6]Giddens (1994, 66ff.) explains compulsiveness or addiction as a result of the failure of modernity to come to terms with tradition or detraditionalization. Thus "compulsiveness, when socially generalized, is in effect tradition without traditionalism, repetition which stands in the way of autonomy rather than fostering it" or "repetition which has lost its connection to the 'truth' of tradition".

1.7: Institutional Decline

The literature is replete with claims regarding the declining institutions of modernity. Some deal with the imminent demise of industrial society generally while others address themselves to the failings of particular institutional arrangements, such as liberal democracy, the welfare state, capitalism, the nation-state and so on. Of particular interest to Ulrich Beck (1992; 1995a; 1995b) are the self-generated threats to the institutions of industrial society. Beck's analysis of late modern societies centres around the notion of ecological risk and the paradoxes of the search for security. Thus he argues that the industrial state was conceived for the purposes of security, but the institutions which industrial modernity put in place to obviate and minimize risks, to deal with "the dangers of its own creations" (Beck, 1995a, 107), are themselves endangered by the very scale of the ecological, nuclear, chemical and genetic hazards which now confront it. Beck sees this state of affairs as a paradox because "the technological security state enters into contradiction with itself" (Beck, 1995a, 107) and the impossibility of precaution becomes a destabilizing influence within the institutions. The long-established method of anticipating future uncertainty and hazards by taking out insurance and making a claim in the event of misfortune or accident is no longer applicable. The 'logic of risk' is not appropriate for large-scale, global and amorphous hazards, since they are incalculable, unattributable and uncompensatable (Beck, 1995a, 109). The result is a "crisis of responsibility" provoking a rethink of attribution and regulation. What is more important, the development of large-scale hazards shakes the governing principles of modern society - reason and progress. "The Janus-headed 'progress of self-annihilation' ... gives rise to conflicts that put into doubt the social basis of rationality - science, law, democracy" (Beck, 1995a, 110).

It is my contention that the institutions of early modernity, which were conceived in response to an entirely different suite of conditions and to which late modernity clings, are incapable of providing a response to the ecological risks generated by nuclear, chemical and genetic hazards. Gottweis (cited in Beck, 1995a, 81) has written of the gap between the potential hazards and risks of modern society and the political capacity to handle these technological and cultural developments. This manifests as a "crisis of political output". As citizens, increasingly aware of risks, mobilize against the threats, "the ensemble of legal and administrative tools, developed for the solution of quite different problems and hence antiquated, comes up against factual and financial limits to the solution of problems". The immediate

consequences of environmental disaster can be observed in the political breakdowns of some parts of the "developing" world, but more generally the function of ecological risk is to raise fundamental questions about human social organization summarized thus:

> [B]ecause ecological issues generally are either larger or smaller than our ecologically oblivious institutions, they raise additional questions about how we might restructure the scale and functioning of human, social, economic and political practices as well as the self's relation to these practices (Coles, 1992, 194).

It is becoming clearer that the programmes of welfare state liberalism and socialism are bereft of responses to the kinds of problems confronting the late twentieth century. They no longer have the same illuminative power nor are they capable of motivating and mobilizing action, a contention which will be enlarged upon in Chapter 2. However, problematizing their exhaustion, as Stephen White (1988, 2) says, is to question some of the central tenets or values of modern culture. Liberal regimes are criticised for their inability to achieve social justice, to overcome racial inequality, or to prevent oppression of minorities (West, 1995). The dimension of freedom is characterized as negative and insufficient for genuine freedom (Gould, 1988), while the nexus between liberalism and capitalism is viewed as the most compelling obstacle to genuine freedom and equality. Moreover the restriction of liberal values to political and economic arenas means that governments are at a loss to intervene in essentially cultural problems, such as oppressions based on race, gender and sexual preference.

1.8: Liberalism as Moral Order

"Liberalism both needs morality, and makes it impossible" (Poole, 1991, ix).

As a social order, liberalism is thin on moral direction. The preoccupation with individual freedom means that specifying the goods of life has been relinquished to individual choice. Further, the paramountcy of individual freedom means that liberalism construes the pursuit of individual goods as a constraint on others' pursuit of individual freedom. Justice both ensures individual rights and contains the pursuit of individual goods. This narrow interpretation of justice prevents liberals from seeing that justice due to others may well be constitutive of one's own good and that ensuring justice by attending to our individual rights is a necessary but not altogether a sufficient condition for our wellbeing. Consequently liberalism is incapable of

grasping the ecological insight that individual goods are constituted by the goods of others with whom one is in constitutive relationship (Poole, 1991, 86).

It is because justice and welfare have been restricted to questions of individual rights rather than justice being conceived as just one of the goods necessary for sound human wellbeing that liberalism has so far failed to develop an adequate moral ground for human action. Indeed, its organizing precepts and institutions make moral behaviour decidedly difficult. Scientific reasoning, which expelled questions of value from the domain of truth, has also failed to deliver on its claims to objective truth, while the capitalist market and mode of production serve to reinforce instrumental values, where others can only function as the means to fulfilling the desires and needs of the self (Poole, 1991, 88). The values of utility govern all relationships, severing the constitutive links between individuals and focussing the goals of action on consumption and power.

These goals are at once both unsatisfying and unsatisfiable. Disillusionment, dissatisfaction, and pathology are the necessary outcomes of the thin moral order that is liberalism. Its institutional arrangements and systems of knowledge have cut the moral ground from beneath the individual who must now attempt to fashion a coherent existence without recourse to objective moral values. However, for the modern individual, cut off from his/her own moral resources and without the possibility of recourse to a wider social context, identity loss and failure to construct a coherent sense of self are the only possibilities; in short, nihilism.

1.8.1: The Origins of Modern Morality

Modern morality had its origins in that constellation of events, forces and ideas which increasingly gained general acceptance throughout the seventeenth and eighteenth centuries. Stephen Toulmin has described how the switch to rationalist science, with all its radical implications for ethics, law, philosophy, politics and theology, was in fact a search for certainty in an era of general crisis, in the social and economic spheres as well as intellectual and spiritual provinces (Toulmin, 1990, 69ff.). He documents an era in the first half of the seventeenth century of not only political and economic breakdown, but also of theological horror wrought by the Protestants and Counter-Reformationists. These developments were accompanied by a change in the accepted order of nature, no doubt exacerbated by the occurrence of a mini Ice Age, which had significant implications for agricultural production. "The breakdown of public confidence in the older cosmopolitical consensus" was therefore

not surprising. Nor is it surprising that early moderns should be attracted to a cosmology and epistemology which could override the uncertainty of those years and which could take a neutral stance between competing religious positions.

However, the desire for a regular and orderly world had considerable implications for the moral order. The experience of the Religious Wars had as its legacy a loss of faith in the moral nature of humankind. Underpinning the new moral order was Thomas Hobbes' pessimistic conclusion that people could not be left to themselves to be moral or to act morally. They needed the guidance of rules - proscriptions and prescriptions. His essentially pessimistic view of human nature is not surprising considering that the Thirty Years War was indeed "a war of all against all". The only alternative was a moral order founded on rules. Having systematic guidance for moral behaviour was the only antidote to erratic, unreasonable and uncontrollable action (Bauman, 1995, 257-259). "The moral thought and practice of modernity was [therefore] animated by a belief in the possibility of a *non-ambivalent, non-aporetic ethical code*" (Bauman, 1993, 9).

The mistrust of passion and emotion and human spontaneity which was the motivating factor in the search for such an unambiguous ethical code had as its corollary the elevation of reason and logic to the task of providing regularity, controllability and predictability to the conduct of human affairs. Applications of reason and logic would control the irrationality of human behaviour at the same time as the unpredictability of other nature would be brought under human control by enlisting the services of rational science and technology. It was but a short step to the equation of moral progress with technological progress (Jonas, 1984, 162-169).

The experience of modernity has ultimately given the lie to this latter fiction (Bauman, 1991, Ch.1 ex parte). Some argue that those ways of knowing derived from Enlightenment conventions of reason and objectivity, and which favour technocracy, in fact have diminished our capacity to address questions of value and have proven incapable of attending to complex issues and problems (Spragens, 1981; Poole, 1991). Further, the 'legislative ethics' which would govern human affairs and provide certainty does not have the capacity to function as a guide for the making of choices for both meaningful individual and social existences:

> Morality has taken the form of duty; it seeks, not to guide our choices towards meaningful life, but to restrict them. Morality has learned to limit its concern to what is right; it leaves it to us to work out what is good. Once morality has chosen to concentrate on

> issues of right and duty, it is ill-suited to offer guidance on the more subtle and nuanced questions as to how we might pursue our wellbeing (Poole, 1991, 135; see also Bauman, 1995, 35-37).

1.8.2: The Nature of Modern Morality

In seeking to sublimate the free-play of the irrational passions, modernity created a split between reason and emotion, a division which is concretely expressed in the public/private dichotomy (Pateman, 1989, Ch.6). Two different moralities apply to these spheres. The morality of the public arena is extrinsic, impersonal and lends itself to universalizable rules. It is a morality which is appropriate to the impersonal, market relations of commercial society. It is instrumental in that its purpose is to regulate transactions between property-holders and other contractual relations in the interests of consistency and efficiency, by specifying the rights and duties which apply to either party. It is a morality of duty, in which each of the parties has reciprocal rights and duties sanctioned by penalty. The morality which guides these instrumental relations takes the form of a set of constraints on one's actions imposed by the rights-claims of others. It is one's duty not to interfere with another's exercise of his rights. Justice is done by attending to one's duty. As these duties are imposed heteronomously, there is little scope for the development of the autonomous moral self (Poole, 1991, 51-56; Bauman, 1993, 53-61).

By contrast, the morality of the private sphere is intrinsic, the instrumental egoism of the public sphere being transcended. Familial relations, rather than being universalizable, are particular and personal. Individuals are valued for themselves, rather than as means to an end. The motivation for action is the wellbeing of the other family member or friend. It is not the prospect of suffering a sanction or penalty but the desire to fulfill one's commitment and responsibility to the other person, with whom one is in relationship, that is the motivation for action. Thus while the public sphere is governed by an ethic of justice and duty, the morality of the private sphere consists in care and responsibility. Here the good of the carer resides in achieving the good of others (Poole, 1991, 51-56).

The historical basis for this dichotomy of modern moral philosophy has been located in the overthrow of the teleological view of man in the Aristotelian/Christian worldview and its replacement with the early modern notion of the autonomous and private self (Benhabib, 1992, Ch. 5, esp. pp.153-158). Prior to the modern period, moral theory was principally concerned with achieving the good life, but from the time of Hobbes it became focussed on justice as fairness alone, the good life

becoming the subject of the individual subject's own interpretation and creation. With the destruction of the old teleological view of man's relation to nature, "morality is thus emancipated from cosmology and from an all-encompassing worldview that normatively limits man's relation to nature", while the individual's relation to the cosmos (the order of nature) and to ultimate existential questions of being becomes privatized (Benhabib, 1992, 154). It is this bifurcation of the moral order of justice and the moral order of the good life, which underlies the schizophrenic existence of the modern individual, who is at once both "public person and private individual" and who must negotiate the conflicting demands of "autonomy and nurturance, independence and bonding, the sphere of justice and the domestic, personal realm" (Benhabib, 1992, 158).

1.8.3: Emancipation from Morality

The thinness of modern morality has much to do with the constraints dictated by two of its most pervasive institutions - the market and the state. The market with its invisible hand and the state with its access to pooled resources, both with a capacity to reduce the essential messiness and ambivalence of moral decision-making, are attractive substitutes to the individual exercise of moral responsibility (Bauman, 1993, 182-183). The moral code of the market has its basis in the utilitarian doctrine of the pursuit of rational self-interest as a foundation for social wellbeing, tempered by a Kantian moral regard for reciprocal rights and duties (Poole, 1991, Ch.1). As I shall demonstrate both philosophies have significant limits in the context of justice for the environment.

The emergence of egoism or self-interest as a defining feature of the modern age is explained by Romand Coles (1992, 178) as arising from the two "ontological conceits" of modernity, namely, a belief in a largely discoverable universal truth and the belief that man is the ground of the truth of things. As a result truth and norms shift about according to which power strategy is employing the truth, thus destroying any claims to universality. In the absence of universals man is left as his own ground, and those who inhabit the social world can only exist as "beings-for-the-self". *Ergo* egoism prevails along with the restless search for truth. The humans who inhabit this world bereft of metaphysical truth often become "self-aggrandizing", "unlimited by past morals". Norms, such as they are, are directed to the enhancement of productivity, while the "various forms of nihilism ... deflect criticism and thwart a sense of responsibility for and commitment to anything that lies beyond the self"

(Coles, 1992, 179). Thus it is that productivity and responsibility sit in constant tension in modern life.

The requirement of market relations that partners in transactions be treated instrumentally means that we cannot recognize the "independent existence of others ... as a necessary condition of our existence" (Poole, 1991, 143). The first step towards social morality is to recognize others as ends in themselves, as having their own distinct existence.

The demands of the modern economic order for a mobile labour force and for self-interested behaviour have resulted in the handing over of formerly familial and communal responsibilities to the state, which not only provides for the needy but decides who is needy and their relative needs. Thus both the market and the state absolve us from moral decision-making at the cost of a loss of moral fluency (Mulgan, 1997) or moral competency and foreclose on opportunities for the attainment of moral maturity, that is, the development of the moral self.

> Paradoxically, the modern state and the modern market 'demodernize' those exposed to their impact: they both dwarf the most modern of the modern person's qualities: the ability to choose autonomously, and to choose where it really counts. Both cloud the reality of the modern moral condition - both belie the fact that at the end of the day all the substitutes for moral conscience only dull moral responsibility and render moral action all that more difficult, while changing nothing or next to nothing in the incurable solitude of the moral person, face to face with the aporia and ambivalence of her or his moral condition. No amount of mediators and no 'agentic state' can change the truth of the matter - that, in the last resort, it is - as it always has been - a question of being able to act as one's own moral agent (Bauman, 1993, 183).

Modern technology, too, is a source of estrangement from the moral order. It is argued by Bauman (1993, 188) that the course taken by modern technology has had as its outgrowth the domination of means over ends, that is to say, that simply having the technical capacity justifies whatever ends: "the outcomes are worthy because the know-how is there". The objective of modern progress is not the achievement of particular ends, but to increase man's capacity for action or for achieving whichever ends he may decide are appropriate ends for his technology.

The Promethean application of science to modern society's problems has had, as one of its victims, the moral self (Bauman, 1993, 198). Technology's *modus*

operandi is to split problems into manageable units and attack them separately with different bodies of expertise. Humans are no less technological products and therefore no less fragmented than any of the technical problems confronting humanity (Giddens, 1991, 137).

> The moral self cannot and does not survive fragmentation. In the world mapped by wants and pockmarked by hurdles to their speedy gratification, there is ample room left for *homo ludens*, *home economicus* and *homo sentimentalis*; for gambler, entrepreneur or hedonist - but none for the moral subject. In the universe of technology, the moral self with its negligence of rational calculation, disdain of practical uses and indifference to pleasure feels and is an unwelcome alien (Bauman, 1993, 198).

In the task-oriented, problem-solving world of modern technology, there is no room for *homo moralis*, concerned about the ends to which technical invention may be applied.

1.8.4: Summary

In summary, the shared principles which should serve as a guide to collective existence are being undermined by the very institutions and conceptual ideals that were supposedly designed for moral certainty. Liberalism is nihilistic and incapable of furnishing the conditions under which individuals can fashion a coherent sense of self and thus meaningful individual and collective existences. Legislative ethics or the morality of duty imposed from without leaves little scope for the development of the autonomous moral self, while the institutions of modernity - market and state - with their narrow senses of reason stifle the practice of moral action. Moreover, the bifurcation of modern life between public and private spheres begets conflicts between public duties and private cares, while public morality, which dominates, is fit only for the impersonal and contractual relations of the market. Further, technological progress has not brought moral progress. Rather the practice of technology privileges means over ends, thereby removing values from any discourse about the ends of technology. It is a case of the means determining the ends.

1.9: Responsibility

In the search for moral certainty, the substitution of autonomous moral choice by an ethical code has proved to be an illusion. The side-effects generated by industrial production, by the nuclear industries and by genetic engineering have

brought modernity full-circle, to the starting point of moral ambivalence and existential uncertainty (Bauman, 1991; Beck, 1992). Modern society was deluded in thinking that it could absolve itself of responsibility, attaining moral certainty by delegating questions of moral choice and moral dilemma to the market, the state or its bureaucratic apparatus.

Responsibility is, as Bauman (1989, 184) says, "the building block of all moral behaviour". It is the product of proximity - of being with others - and conversely, social distance results in the lack of a moral relationship, "heterophobia". Modern rational society, through its technological and bureaucratic apparatus, achieved not only social distance but also distanced society from its biophysical environment, by seeking to make society independent of nature. Consequently both fellow humans and nonhuman nature were transformed into the Other. The separation of individuals within society and of society from nature meant that the morally responsible behaviour of "being with others" was neutralized: "Responsibility is silenced once proximity is eroded" (Bauman, 1989, 184).

In order to determine the kind of responsibility that might inform our lives, we need a better understanding of responsibility *per se* and of how it has been silenced. Writers of the postmodern, for example, have characterized the ethics of the modern as a 'responsibility to act', distinguishing this from a postmodern 'responsibility to otherness' (White, 1990). This is a useful distinction because differentiating the modern sense of responsibility to act resonates with the notion that modernity had its origins in the search for certainty and order and with other fundamental tenets underpinning modern existence, namely productivity, utility and individualism. It also resonates with claims of a narrow sense of responsibility peculiar to the liberal order (Sayer, 1995) and with feminist differentiation of a masculine ethic of justice and rights from a feminine ethic of care and responsibility (Gilligan, 1982; Benhabib, 1992). For the purposes of later discussion we might characterize the modern sense of responsibility as an immature or simple one[7]. A simple sense of responsibility entails only responsibility to the self and to self-serving relationships. It is the responsibility which governs the instrumental relationships of commerce. It embodies only a limited sense of responsibility to the other, that is, to constitutive relationships.

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[7]It is interesting to note that Weber (1961, 127) also made the connection between responsibility and maturity. Thus the mature individual exhibits an awareness of responsibility for the consequences of his/her actions and acts accordingly.

Responsibilities to the other are those responsibilities which arise simply from human existence. They are the inescapable responsibilities from being with others, prior to any sorts of social arrangements or moral rules. Bauman (1995) differentiates these moral responsibilities from concrete responsibilities, which accrue "through contract, calculation of interests, or enlisting to a cause". The ethical code of modernity is a legislative ethics that absolves the modern individual from the ambivalence and messiness of making moral choices, where responsibility is reduced to a "finite list of duties or obligations" (Bauman, 1995, 4). Conscience and guilt for wrongs done to others are replaced and "simplified to the straitforward dilemma of obedience or disobedience to the rule" (Bauman, 1995, 4) with the result that the self has become the centre-point of modern ethics and consideration of the Other has been temporarily suspended. The self of the modern project, freed from the agony of sin and religious prescription, and disembedded by being absolved of responsibility to others, was furnished with a pretension of certainty by a legislative ethical code. In the process, human choices were severed from their moral essence. Individual freedom meant not only freedom from arbitrariness and religious stricture, but also freedom from moral choice, that is, irresponsibility.

Meanwhile responsibility "has shifted from the moral subject to supra-individual agencies now endowed with exclusive ethical authority" (Bauman, 1995, 4). These ethical agencies include the principal organizing modes of modern life-bureaucracy, a "hollowed out" public sphere, markets and business, science and city life. Bauman and others argue that it is by these means that consequences have been separated from moral responsibility. Indeed, as previously mentioned, the whole of industrial life has been painted as an "elaborate labyrinth" of "organized irresponsibility" (Beck, 1995a, 61). Modernity's modes of organization, conceived to restore certainty and eliminate randomness, have now become the sites of unforeseen side-effects for which no one can take responsibility. The problem arises in large measure, according to Hans Jonas (1984), because our inherited ethical codes have much to do with contemporaneity and proximity, but our present technological capacity supercedes those rules. Actions may have unanticipated consequences in unanticipated places at unanticipated times. It becomes impossible to sheet home blame for consequences such as the effects of climatic change, for if the truth be known, we are all responsible, if only in a small way. Responsibility becomes collective rather than individual.

The impossibility of directing responsibility is further exacerbated by the intense division of labour and technical specialization of modern societies. Large

numbers of people may have participated in the production of side-effects, but each may have played only a small part. Who then takes ultimate responsibility for disastrous consequences?

As well, the fragmentation of persons into roles allows the avoidance of responsibility (Bauman, 1993, 19). It is a relatively simple avoidance strategy to say: "It's not my role", when confronted with an unpalatable task. It is the conditions of modern life taken together which allow responsibility to *float* (Bauman, 1993, 17-19), or in Bauman's words, "the guilt is spread so thinly, that even a most zealous and sincere self-scrutiny or repentance of any of the 'partial actors' will change little, if at all, in the final state of affairs" (Bauman, 1993, 18-19).

The process by which some actions or objects of action are placed beyond the sphere of moral evaluation into ethical neutrality, Bauman (1995, 149, 261) terms *adiaphorization*. This process operates through all those modes of organization mentioned above. In the bureaucratic sphere, the standard by which actions are evaluated is procedural correctness. Responsibility is that due to the organization and supercedes all other responsibilities. In modern organizations, members are trained to put their own moral feelings into neutral and to be subservient to the discipline of the organization. In this way members are morally exempted from the consequences of their decisions. So too in business, instrumental rationality, as its guiding principle, allows means to overtake ends. One may only deliberate about varying inputs; the ends to which products are put or the conditions of production are not up for moral debate (Pepper, 1996, 89-90). The allocation or distribution of the products is achieved by means of allotment to the highest bidder, but the efficiency of the allotment process says nothing about the entitlements or the suitability of the bidder. It is an ethically neutral process:

> [T]he logic of business which rules unfettered contemporary markets breeds also oblivion and indifference to anything not relevant to the instrumental task at hand, everything extending beyond the immediate space and time of action (Bauman, 1995, 263).

Poole (1991, 7) similarly concludes that the instrumental logic of business, where an individual can only be a means to another's ends, makes it "impossible to conceive of activities which are genuinely other-directed". In other words, markets are oblivious to side-effects and the moral claims of future generations and other natural entities.

Markets are one of those agents offered to us to ease the agony of being moral subjects. If we attend to our self-interest, then the invisible hand will ensure our shared interests, excusing us from concern for our fellows' wellbeing. It is quite a seductive offer and "an ingenious method for the dispersing of responsibility in society, so that it can no longer be identified with any geographical, social or political location" (Altvater, 1993, 20).[8] The "dispersal and hiding of responsibility" in the liberal social order by handing over political decision-making to self-regulating markets had its origins in a deep pessimism about the political capacity of existing authority, that is, religious hierarchy or inherited social status, to ensure the security of property and of persons. Thus it was the constant possibility of property confiscations and the insecurity of social status that explains the recourse by early liberals to the market and the ensuing depoliticization of liberal societies (Kassiola, 1990, 83-90). The irony is that the anonymization of responsibility in fact protects the real power holders (Kassiola, 1990, 89).

The capacity for moral agency has also been dulled in modern societies as the state has taken to itself the bulk of social welfare functions, liberating its citizens from decisions about who should receive succour and the character of needs (Bauman, 1993, 183). The centralization of decision-making denies responsible action to both individuals and communities (Norgaard, 1994, 165) and has been linked by Franck Amalric (1994, 234-235) to the failure to control population growth and environmental degradation in "developing" countries. Amalric links the growing intrusion of state and market into local control of natural resources, in other words, their development, with the "de-responsibilization" of local communities. This process represents a breakdown of community institutions which formerly were responsible for population control and for the sustainable use of local resources. On this reading, it is tempting to conclude that responsibility and sustainability go hand in hand.

Not only are individuals limited in the exercise of moral choice by modern life, but our democratic representatives find themselves incapable of making decisions on technical matters involving the welfare of their constituents and necessarily delegating responsibility to technical and scientific experts in decisions about such areas as maximum allowable pollution levels or resource use (Beck, 1992, 186-187; Beck, 1995a, 117). Business shunts its responsibility into the unforeseen side-effect and the "commercial decision", while scientific institutions are cut off from the consequences of their innovations by the belief in the ideology of progress,

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[8]Poole (1991, Ch.1) provides a more comprehensive understanding of the moralities of the market.

which shields them from scrutiny. The legislators and administrators "subvert their own responsibility [by transferring it to] 'scientific-technological' expertise" (Beck, 1995a, 117; but see also Beck 1992, 212-213). As a consequence elected representatives surrender their power to politically unaccountable corporate elites (whose only claimed responsibility is to shareholders), while retaining all responsibility, thus becoming impotent. This impotence is reflected in the citizenry's loss of confidence in the political sphere (Beck, 1992, 186-187; Crook, Pakulski, and Waters, 1992, 94; Mulgan, 1997, 193ff.).

Progress, one of the foundational ideals of modernity, is deeply implicated in the organized irresponsibility of modern life in that it sanctions social change without question (Beck, 1992, 213-214). The faith in progress substitutes for moral decision-making, permitting social transformation without democratic legitimation as business and technoscience carry on their activities unaccountable for their side-effects. The blind commitment to progress brooks no heretical dissent based in the belief that all change is progressive change. Any questioning of development proposals usually provokes counter charges of impending job losses and economic downturn if they fail to proceed. Progress and its side-effects are accepted as inevitable and used as an excuse for powerlessness (Beck, 1995a, 65-66). "Progress is social change institutionalized into a position of non-responsibility" (Beck, 1992, 214). There is a double irony here; firstly, that the principle of progress, a guiding tenet of development since early modern times, should now be employed as an ideology to sever productive activity from moral responsibility, and secondly, that the belief in progress which created modernity should have become a tradition which now threatens to subvert it, a secular religion with all the features of an unreflective religious faith (Beck, 1992, 214).

City life too contributes to the floating of responsibility. Modern city life has its origins in the breakup of feudal social relations and the dispersal of agrarian communities in part as a result of the enclosures of the early modern period, which saw the aggregation of more and more people in cities. These were essentially cities of strangers and in order to cope with the crowding of physical space, certain strategies were necessarily evolved. These strategies enable social and therefore moral distance to be maintained (Bauman, 1993, 153ff.; 1995, Ch.5). As the individuals with whom one shares physical space remain socially distant, relationships can be anonymous, encounters episodic and skin-deep, and therefore involving no moral commitment. Because there is no engagement between "spatially

and temporally *whole* selves", city life suspends moral self-consciousness and responsibility for the other (Bauman, 1995, 134).

Additionally, the physical organization of cities bifurcates city-dwellers' actions from their consequences. Urban systems do not always fit with the needs of the ecosystems on which they rely for food and water supplies, transport and waste disposal. It is the centralization of these systems that denies city-dwellers the opportunity to be responsible for supplying their own needs - capturing water, growing food, generating energy and so on. The use of water in cities is profligate since users for the most part do not pay the true cost of its harvesting, while the centralized collection of sewage and solid waste means that city inhabitants are relieved of responsibility for the side-effects of their activities - stormwater pollution, disruption to marine and aquatic ecosystems from sewerage outfalls, and evergrowing quantities of solid waste, which are rapidly devouring available landfill space.

In endeavouring to impose certainty on human affairs and to evade the agonies of moral choice, modern societies have erected a panoply of institutions, ideologies and strategies for evading, floating, delegating and dispersing responsibility to the extent where Hannah Arendt (cited in Beck, 1995a, 65, 90; 1995b, 93, 151; and Bauman, 1993, 126) could speak of the "anarchy of progress", leading to "no man's rule", the greatest tyranny of all because no one bears any responsibility. It seems paradoxical that a social order designed to forestall uncertainty and reduce moral anxiety should now be so riddled with irresponsibility that its institutions, in the face of serious social, economic and environmental disruption, appear incapable of addressing the uncertainty generated by the side-effects of its own development. 'Passing the buck' is undoubtedly a dis-ease of late modern life.

Nevertheless, on the *nostrum* that in adversity there is opportunity, Bauman (1995, 7, 19) contends that the demise of the certainty-producing ethical code is an opportunity to acknowledge responsibility and to accept that the moral condition is inherently one of ambivalence. It is tempting to propose that modernity may have mis-taken its path in the early modern period and that the urgent need for certainty may have set modernity on the road to irresponsibility. A hypothetical alternative path to the kind of social order which guaranteed human freedom and moral autonomy and security of persons and property may have been a more modest but

less morally certain one, and more cognizant of the realities of human existence, most importantly its interdependence with the biophysical realm.

1.9.1: Accelerated Irresponsibility: The Neoliberal Turn

Before I consider the philosophical underpinnings of a possible alternative journey, the neoliberal turn that a number of democracies have pursued in varying degrees over the last two decades needs to be analysed in the context of irresponsibility. I would argue that the processes leading to system-wide irresponsibility have been accelerated during this time as governments have undertaken a zealous and ideologically-driven pursuit of programmes favouring deregulation and privatization. An argument could be mounted that in the atmosphere of general crisis and incapacity, the neoliberal turn constitutes an escape or a retreat to the market, "a general loss of political nerve" (Pierson, 1991, 218-219), as a response to a loss of political legitimacy. There is a parallel here with the experience of the eighteenth century and the recourse to a self-regulating, anonymous market by a commercial bourgeoisie hamstrung by aristocratic/patriarchal power (See Ch.3). The crisis of political legitimacy postulates a situation where politicians from mass milieu parties and leaders of trade unions can no longer mobilize mass support and consent for the development programmes which ensure the social conditions of production. For an increasing proportion of citizens they no longer furnish the norms and values which underpin the consensus on which economic development and social and political stability depend.

It is a simple matter for governments to absolve themselves of responsibility by blaming the 'discipline of the market'. Markets are morally indifferent to all but that which is relevant to the transaction at hand. They do not facilitate moral behaviour, as I have already discussed, but rather "bring very strong incentives to evade responsibilities, to pass costs onto the community and to devalue the future and what is left to later generations" (Mulgan, quoted in Bauman, 1995, 263-264). The neoliberal turn has the effect of accentuating the market's moral indifference, as its concepts of private ownership, competition and small government are more likely to reinforce self-interested, short-term behaviours (Sayer, 1995, 163). The experience of the neoconservative era, of greed, selfishness and corruption in government and business, bears out this claim.

The privatization/deregulation route can only prove to be a dead-end (Tickell and Peck, 1995). To use Beck's (1995b, 88) analogy, neoliberalism is "an attempt to

bail out the water flooding into a ship at sea by boring a hole into the bottom". In terms of the cycle of capital accumulation, it might be construed as a 'last ditch' effort to "restore the supportive conditions for profitable capitalist accumulation and labour control" (Soja, 1989, 28). It is a programme aimed at reducing costs to business through smaller government; it is about governments divesting themselves of some of their responsibilities as a response to falling tax receipts (consequent on falling profits and creative accounting) and relegating those functions to the vagaries of markets. It also involves business downsizing labour to reduce costs, which the business community applauds as commercial soundness. The lack of a government response to these developments expresses both its moral indifference and impotence.

What the recourse to deregulation and privatization serves to do, however, is to highlight and exacerbate the irrationalities of the modernity project and to diminish further any capacity for moral direction and therefore any capacity to address complex issues and problems. The "consensual generation of norms" has been replaced by "money and power" as the cement for the social bond (Benhabib, 1992, 80). Consequently, individuals sense a loss of efficacy and agency, leading to alienation and cynicism. The late twentieth century is thus characterized by loss - loss of a coherent sense of self and a sense of belonging that comes with the practice of collective responsibility.

There is a sense that, at the end of the second millenium, the modernist project of securing certainty and predictability for existence and alleviating moral anxiety has come full circle. Progress has benefitted many, but disappointed even more. Persistent and deepening disparities of global wealth, recurring famine, social dislocation and inequality, the breakdown of personal relationships, and environmental degradation are interdependent phenomena. It is clear that the objective of constructing a universal moral code was an illusion. With the illusions of certainty and legislating for moral conduct now exposed, individuals can at last confront the fact that moral evaluation is a condition of individual autonomy - there is no freedom without responsibility, or in the pithy revelations of a former Australian politician, "there is no such thing as a free lunch". Of the lessons to be learnt from the modern experience, for Bauman (1993, 10, 12) the most telling is the essential moral ambivalence of the human condition and uncertainty the perennial condition of the moral self.

The fact is that absolution from responsibility in modern life has not produced existential certitude but rather has eroded moral competencies and devalued the

moral qualities or virtues necessary for living sound and meaningful existences. The institutions of modernity as they have evolved fail to encourage the social conditions which nurture the development of the necessary moral qualities. The question then arises of what philosophical foundations the early moderns might have utilized to produce the kinds of social institutions and therefore moral qualities which would have favoured socially and environmentally sustainable relationships.

1.10: An Alternative Source of Enlightenment

1.10.1: Enlightenment as Critique

Despite the ambiguity of the Enlightenment's benefits and disillusionment with the non-fulfillment of its ideals, the project remains attractive to late moderns for its emancipatory potential. Ecological theorists are inclined to jettison the whole project largely because they associate it with the mastery of nature ideal. Thus the origins of the present ecological crisis are located in the will to subjugate and dominate all that is associated with nature, including women, just as Francis Bacon ordained for the betterment of mankind. That there may be untapped potential in the Enlightenment project for ecological thought is a possibility explored by Tim Hayward (1994, 19), who argues for the relevance of "significant parts" of the project in theorising the ecological transformation of human social structures and values. Hayward locates that potential in the mastery ideal's twin, enlightenment as critique, albeit that, as he concedes, criticism "seems permanently threatened by the ideal of mastery".

The ideal of enlightenment as critique is associated with one of the two parallel trajectories of modernity, namely the tradition of humanism, which Stephen Toulmin (1990) argues had its origins in the intellectual options opened up by the late Renaissance humanists, such as Rabelais, Erasmus, Shakespeare and Montaigne. The ideas of the humanists were influential until the early seventeenth century when the cumulative effects of fifty years of general societal crisis resulting from the fundamentalist horrors of religious dogmatism made the rational social order promised by natural philosophers such as Déscartes and Newton appear very attractive. Toulmin argues that the humanist tradition was eclipsed by the rationalist revolution of the seventeenth century, when the urgent need for certainty and stability made a rational social order more attractive than a lively society modelled on humanist ideals. Although the rationalist trajectory, embodying the ideal of mastery, has come to dominate modern life, humanism and its critical ideal was never entirely

overshadowed. It has surfaced from time to time throughout the period of modernity, in the works of Spinoza and Vico in the seventeenth century, Hume and the Scottish Enlightenment in the eighteenth century, Hegel and Nietzsche in the nineteenth century, and in the writings of the Critical Theorists and postmodernists of the twentieth century.

For both Toulmin and Hayward the antidote to rationalism and associated mastery problems resides in recovering devalued elements of the modernity project – thus Toulmin seeks to recover the self-critical scepticism typified by the works of the Renaissance humanist, Michel de Montaigne while Hayward argues that renewal of the Enlightenment project through recovery of its critical ideal has much to offer ecological thought. For Hayward, advancing the critique of knowledge, which is indispensable to ecological thought, can be achieved by drawing on the critical tradition within enlightenment thought and imbuing it with a degree of reflexivity such as developed by Critical Theory. In joining critical reflexivity to ecological thought, he hopes to generate the kind of enlightenment necessary for ecological transformation and thus to reign in the mastery project. It is in the problems common to ecology and enlightenment that Hayward identifies this potential and by addressing these problems together, he argues, the enlightenment project can be renewed.

The concerns common to both ecological and enlightenment thought revolve around how we understand the nature of the world, the place of humans in it, and the determination of appropriate guiding principles for human action (Hayward, 1994, 39). While ecology can furnish understandings of the natural world and the place of humans in it, it cannot "explain the full range of human social behaviour". The necessary "concepts and categories ... simply cannot be worked up within ecology as a natural science" (Hayward, 1994, 40). There are advantages for ecological thought in recovering the critical ideal of enlightenment thought in guarding against the assumption of an uncritical and dogmatic ecology (see Section 1.13.2 on the dangers of an uncritical acceptance of biological metaphors). However, to yield the kind of substantive knowledge crucial to the project of ecological transformation, it must go beyond the simple critique of challenging presuppositions, albeit that this is a crucial step in the project. "If critique is to be turned to ecological ends, ... critical theory will also need to be informed by ecological understanding of a realist sort" (Hayward, 1994, 40). A critical realism informed by ecology thus recognizes that human social structures are "embedded in, conditioned by, and in turn [act] back upon the rest of nature" (p.49), notwithstanding the difficulties of grounding determinate values and

obligations in an ecological ethos. Critique inspired by a realist ecology leads one to conclude that relations between knowledge (science) and values, and reason and nature take more of a dialectical form than an oppositional one as those ecological theorists who would reject the enlightenment wholesale would aver. Thus while Hayward argues that ecological thought can engage productively with enlightenment thought through the tradition of critique, I seek to demonstrate that there are resources in the now subordinate humanist trajectory of modernity, prefigured in the works of Michel de Montaigne and his self-critical, self-aware scepticism, for the development of the ecologically informed critical realism advocated by Hayward.

1.10.2: Montaigne

In drawing out the differences between the humanistic modernity prefigured by Montaigne and the rational modernity resulting from Descartes' self-assertive *cogito*, Toulmin demonstrates why a Renaissance figure like Montaigne is particularly congenial to us in the late twentieth century. Most importantly, Montaigne exemplified the openmindedness, sceptical tolerance and reflective modesty about the limits of human capacity in matters of "unquestioned Truth" and "unqualified Certainty" that characterized the humanistic tradition. He recommended the suspension of judgement on matters of general theory, advocating rather the accumulation of a "rich perspective" on both natural and human worlds, based on actual human experience. As Toulmin (1990, 27) observes: "This respect for the rational possibilities of human experience was one chief merit of the Renaissance humanists, but they also had a delicate feeling for the *limits* of human experience". As a result they were tolerant of plurality, ambiguity and uncertainty, and thus accepting of the very essence of human existence. Unfortunately those insights were trumped by the scientific revolutions which followed, along with any intellectual concern for the practical knowledges previously supplied by oral traditions, the particularities of daily existence, the experience of particular localities, and the timeliness of events. They were replaced by abstract, general, universal and timeless theories (Toulmin, 1990, 35).

This theoretical turn in philosophy was initiated by Descartes. The essence of the rationalist impulse is to be had in the phrase, *cogito ergo sum*, which contrasts starkly with the intellectual modesty of the humanists, typified by Montaigne's rhetorical question: "*Que sçay-je?*"[9] (Book II: 12, 591[10]). But Montaigne's modest

[9]Old French form meaning "What do I know?"

[10]All references to Montaigne's texts are those found in M.A. Screech's 1991 translation.

self-scepticism with its acceptance of the uncertain realities of human existence was not much in demand by the mid-seventeenth century. The need for certainty, to banish doubts and to secure order, meant that Descartes' method for rational thought with its resolute firmness was a much more attractive proposition than the pliant ambivalence of Montaignean doubt. Descartes used doubt to escape from uncertainty, but as Ulrich Beck (1997, 163) remarks, his method of escape set modernity on the path to "expertocracy".

Drawing on Toulmin's insights into Montaignean scepticism, Beck (1997, 162) has attempted to explicate the possibilities of radical self-doubt (*dubito ergo sum*) for "an ethics of post-industrial and radically modern identity and social contract". He senses this possibility in the destruction of the old grand illusions:

> Scepticism, contrary to a widespread error, makes everything possible again: questions and dialogue of course, as well as faith, science, knowledge, criticism, morality, society, only differently, a few sizes smaller, more preliminary, more revisable, and more able to learn. That also implies, however, being more curious and more open to contrary ideas, things unsuspected and incongruous, with the tolerance based and rooted in the ultimate certainty of error (Beck, 1997, 163).

However, Beck is not referring to just any doubt, but reflexive doubt, which unlike linear doubt (subject to infinite regression and despair) is doubt turned back upon itself. It is the doubt that creates the possibility for learning and for responsibility. Reflexive doubt is the antidote to dogmatic truth. It is productive rather than destructive. It is the virtue which enables self-limiting development and therefore perhaps the "ecological reform of society". Doubt is the vehicle for thinking, learning and creativity.

The philosophers of the Frankfurt School and subsequent postmodernists have criticised the theoretical direction taken by modernity and the debilitating effect it had on its critical potential. Thus, "[r]uthlessly, in spite of itself, the Enlightenment has extinguished any trace of its own self-consciousness" and further "[o]n the way from mythology to logistics, thought has lost the element of self-reflection" (Adorno and Horkheimer, 1944[1972], 37, 4). Modern thought was thus weakened by the loss of its capacity for self-reflection while its ability to accommodate the destructive aspects of progress, or what Adorno and Horkheimer (1944[1972], xiii) refer to as its "recidivist element", suffered as a consequence. It is the recovery of modernity's critical potential that most concerns Ulrich Beck, Julia

Kristeva (Norris, 1994, 90) and other postmodern thinkers[11]. The later Foucault (1984) was also beginning to interpret "enlightenment" as a permanent critique. For inspiration he turned to Immanuel Kant's small text, *What is Enlightenment?*, seeing it "located ... at the crossroads of critical reflection and reflection on history" (Foucault, 1984, 38), and arguing that enlightened reason had subsequently become perverted into unreflective instrumental rationality[12]. For Foucault critique is the enabling condition for truth and therefore of the possibility of an ethics and a politics with genuine emancipatory values. For my own project, it is Montaigne who holds the promise of a recovery of that ethical agency which can result from reflective, self-critical thought.

Before I explore his relevance for the question of ethical agency, I would like to digress somewhat and consider just how Montaigne's humanism resonates with contemporary thought and its relevance to an ecologically sensitive age, in addition to Beck's harnessing of his *dubito* for a critical social theory of reflexive modernity.[13]

Above all else, Montaigne was concerned with the human condition, particularly the relationship between the individual and the rest of life. He devotes a great deal of attention to the traditional problems of philosophy, that is, to questions of existence, for to know how to die well is to know how to live well (Book I:26, 163). The aim of philosophy is the practical one of living, not the theoretical one it became under Descartes' influence, of the acquisition of knowledge for technical means. Through his scepticism he is able to see that science and philosophy can only provide approximate interpretations of reality and not the exact or ultimate truth. "Montaigne's scepticism is more in tune with the doubts of recent science than with the confidence of the great period which immediately followed him" (Sayce, 1972, 188).

It was also his scepticism which enabled him to distil the truth of the human condition, the fallibility of human reason ("imbecillité de nostre jugement") and the uncertainty of all knowledge (Book I: 25). In the *Apology*, he seeks to demolish the pretensions of human reason with humour and irony, thus developing a moderate rationalism (Coleman, 1987, 56). He was fully aware of the paradoxes of the human condition, of its dignity and absurdity (Book I: 54, *On vain cunning devices*), of its

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[11]See Racevskis (1993) on the resuscitation of alternative streams of Enlightenment thought in the construction of a postmodern critical project.

[12]See Norris (1994, 121ff.) on this particular turn in Foucault's project.

[13]To this end, I have relied on the commentaries of Coleman (1987), Sayce (1972) and Screech (1991).

contradictions (for example, Book I: 38, *How we weep and laugh at the same time*; and Book II: 20, *We can savour nothing pure*), and of the inherent inhumanity of human beings (Book III: 9, *On vanity*).

What is most striking about the *Essais* is that what they have to say stands out most starkly in comparison to what followed in the succeeding centuries. His was a moderate epistemology based on the recognition of the many obstacles to knowledge and therefore truth, including differences of view, custom and the vagaries of fortune (Sayce, 1972, 170-171). Reason was an "uncertain prop" in the search for truth (Sayce, 1972, 177) and could be accommodated to any sort of bias, a tendency which subsequent natural philosophers ignored (Book II: 12) (and which recent feminist critics have raised as a problematic characteristic of the use of reason in modern times – see Sect. 1.5.1). Experience, that is the direct perception of reality, is the preferred means of attaining truth, a position which follows naturally from his intellectual scepticism and rejection of logic and metaphysics.

If Montaigne's sceptical attitude to the claims of reason are attractive to critical theorists, then so too are his thoughts on the mind/body dualism of interest to feminists. His stress on the indivisibility of body and mind (*mens sana in corpore sano*, borrowed from Juvenal's *Satires*) parallels a call for the fusion of the rational and the voluptuous. It is the balance of these two characteristics for which one strives. The devaluation of the emotions and the passions in subsequent centuries, as ecofeminists have demonstrated, has had enormous consequences for the treatment of women and nature (Merchant, 1989).

Of interest to environmental thinking is his injunction to live according to the laws of nature - *secundam naturam* - for to live simply is to live wisely (Book III: 13, 1218)[14]. What is more in tune with contemporary evolutionary and environmental thinking though is his conclusion that humanity is simply one genus among the rest of creation, owing respect and duty not only to beasts, but also to trees and plants. "Between them and us there is some sort of intercourse and a degree of mutual obligation" (Book II: 11, 488). This attitude contrasts sharply with the 'transcendence of nature' philosophies which were to predominate from the seventeenth century onwards. Again in the *Apology* (Book II: 12, 513-514), he emphasizes the similarities of humans to other creatures: "We are neither above them or below them". It is "our empty arrogance" that makes us put ourselves above nature.

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[14] Recognition of this injunction is not to ignore the dangers of relying on nature as a blueprint for right action. On this aspect, see Section 1.12.2.

This is where his relevance for contemporary thought relates to questions of ethical agency. When practical philosophy gave way to theoretical philosophy and rationality and logic were separated from rhetoric and the emotions, the implications for the sense of respect and obligation felt by Montaigne were profound. For him, part of one's humanity was in being comfortable with one's corporeality, of having the capacity to accept responsibility for bodily failure, for feelings and for the effects of the things we do (Toulmin, 1990, 40). Descartes, on the other hand, held that emotions and passions were nothing more than a hindrance to the proper functioning of rationality; they were to be suppressed. As a consequence, we needed only to take responsibility for our rational calculations, not for our emotions. "Treating the feelings as mere effects of causal processes, takes them out of our hands, and relieves us of responsibility: all we are rationally responsible for (it seems) is thinking correctly" (Toulmin, 1990, 41).

Consequently, in confining epistemology to cognitive issues, a whole realm of human experience was excluded from consideration - the realm of feelings, emotion and bodily experience. Further, as Toulmin continues: "epistemology involves not just intellectual, but also moral issues" and ignoring the insights of Renaissance humanists like Montaigne constitutes for modernity a form of "moral escapism". Thus, when particularity and local situatedness were bypassed for general and universal knowledge, the possibility for ethical agency was ceded to a heteronomously applied legislative code of ethics (Bauman, 1989, 162; 1991, 20-26). Following the efforts of feminist theorists over the last several decades, we are only now beginning to recover Montaigne's insights into the rigidities and constraints on human potentiality resulting from the reduction of morality to a routine code of ethics. In this respect, Gilligan (1982) and other moral theorists have differentiated a public morality of duty - the ethic of justice - from a private morality of responsibility - the ethic of care. Comments such as those by Ross Poole (1991) resonate with Montaigne's avowal of a positive morality thus:

> I would risk the kind of justice which would take cognizance of good actions as well as bad and give me as much to hope for as to fear: not to be fined is an inadequate reward to bestow on a man who has achieved better than simply doing no wrong (Book III: 13, 1215).

Poole (1991, 60) similarly laments the bleakness of the morality of duty: "It ignores, or considers only indirectly, many aspects of human life and personal

relationships, and in its very universality, it seems to have no place for the particularities of human existence". And Montaigne again: "As nature has furnished us with feet to walk with, so has she furnished us with wisdom to guide us in our lives. ... The more simply we entrust ourself to Nature the more wisely we do so. ... Were I a good pupil there is enough in my own experience to make me wise" (Book III: 13, 1218). Experience is a better guide for moral behaviour than a code of laws which favours moral rigidity and thereby limits human potentiality. "To keep ourselves bound by the bonds of necessity to one single way of life is to be, not to live. Souls are most beautiful when they show most variety and flexibility" (Book III: 3, 922). It is the capacity for flexibility and adaptability which is the main talent possessed by humankind.

Central to Montaigne's notion of flexibility is the idea of diversity, which is a continuing refrain throughout the *Essais*. In fact diversity is the universal principle of existence: "When collating objects no quality is so universal as diversity and variety" (Book III: 13, 1207). One must be sufficiently flexible to adapt to the diversity of customs, laws, rules, and circumstance, and to the inconsistencies, contradictions, and general chaos of reality. It is the multiplicity of reality that is the basis of his scepticism, and it is that which gives him flexibility. A "powerful mind" - which is a consequence of a sceptical attitude - finds its nourishment in ongoing "amazement, doubt and uncertainty" (Book III: 133, 1211), generated by the multiplicity and contradictions of reality.

Along with the indivisibility of mind and body, a recurring theme throughout the *Essais*, Montaigne is preoccupied with the getting of wisdom, a life-long exercise in building the capacity to respond creatively to the multifariousness of reality. If there is any progress it is progress towards wisdom and, for Montaigne, wisdom is in balancing *corpus* and *mens*, corporeality and intellect. How different from the notion of progress through technological achievement, which has been the guiding philosophical force for the modernity of industrial society.

And so it is that Beck finds in Montaigne's moderate rationalism, creative self-aware scepticism and self-reflective, productive doubt a possible method for an alternative enlightenment, which can perhaps "lead to a way of life on the human scale" (Beck, 1997, 161-162). Doubt recovers and valorises those spheres of human existence devalued by the rational turn - the personal, the particular, the oral, the local and the natural. The recovery of these spheres also encourages the possibility of ethical agency, agency set free from the constraints of heteronomous social

structures, for both autonomous and collective responsibility. The moral life is delinked from constraint and relinked to autonomous fulfillment.

The reclamation of the tradition of reflective, self-critical thought prefigured by Montaigne but subsumed by the rationality of what Beck calls simple modernization is captured in the term "reflexive modernization".[15] Reflexive modernization opens up possibilities foreclosed by the industrial deviation of simple modernity. Reflexive modernity, aware of threats and danger, and accepting of ambivalence and diversity, constitutes a radicalized modernity whose engine is doubt and scepticism (Beck, 1997, 168), and irony its governor:

> The god of fully established modernity is doubt, ... [which] makes it possible to transfer the dogmatism of the industrial into the reflected self-limitation of post-industrial modes of production and living (Beck, 1997, 171).

1.10.3: Lessons for Late Modernity

In this era of apparent civilizational change, there are a number of significant lessons to be had from an archaeological investigation of the foundations of modern society. The most obvious conclusion is that attempts to create a social order which maximizes predictability and certainty inevitably end in their opposite, disorder and uncertainty, as now increasingly characterizes industrial society. The needs of late modern societies are not those of the early modern period, for which institutions guaranteeing uniformity and therefore order may have been appropriate innovations.

Secondly, exploring the history of modern rational thought enables us to see that the rationalist philosophy, which underpins the political, economic and increasingly the social spheres of society, rests on a truncated notion of reason; it equates rationality with formal logic. Consequently, if we combine this with the first conclusion, we can see that rationalist philosophy requires the balance of reasonableness and tolerance undergirt by an acknowledgement of the diversity and uncertainty of existence. This latter point suggests that solutions prescribing more of the same - more growth, more production, more markets and more centralized governments - are part of the problem rather than the solution.

Thirdly, as we learn to value human experience along with logic, we need organizing structures which ensure adaptability and flexibility (Toulmin, 1990, 183).

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[15]On the critical power of reflexive modernization, see also Lash (1994, 110ff.).

The metaphors of the solar system and the machine favoured the creation of stable, hierarchical systems. Those metaphors are no longer apposite. What is needed are metaphors which assist us to create stable institutions based on complexity and which possess an adaptive capacity. The rigid, mechanistic and atomistic models of social order which were informed by those metaphors no longer meet the needs of globally interdependent societies. They lack the flexibility, adaptiveness, resilience and robustness, and appropriate feedback mechanisms required in the face of rapid social and natural change, increasing cultural diversity and increasing global interdependence. The institutions of industrial modernity - the nation-state, representative democracy, mass political parties, trade unions, large-scale industrial conglomerates, self-regulating markets, and generous private property rights - were appropriate to an era of relative stability, of cultural uniformity and a world of relatively closed systems, peopled by independent units, and controlled by hierarchical modes of organization. It is to organicist metaphors that emphasise dynamism and change, interdependence and creative transcendence that an unfulfilled modernity must now repair.

Modern society is at a cross-roads similar to that faced by western societies in the early modern era. A self-confident rationalism with its promise of order was then decreed to be the antidote for the extremes of disorder occasioned by differences in religious faith. Our European forebears foresook a moderate rationalist path to order tempered by the insights into human behaviour afforded by the Renaissance humanists, and replaced religious dogmatism with an arrogant faith in reason as mechanistic science. The controlling and ordering structures of industrial society are, as a result of self-generated risks, in various states of crisis. As Beck (1994, 7) concludes: "People are being released from the fictional order of industrial society into the "turbulence of the global risk society".

1.11: Maturity and Ecological Enlightenment

This section will endeavour to draw together Montaigne's insights and Toulmin's arguments for an earlier humanist starting point for modernity, together with the earlier exposition of a rational modernity which is limited in its capacity to take responsibility for its side-effects, in order to argue that, in part, the moral maturity of modernity consists in the acceptance of limits on its projects and in taking responsibility for their side-effects. I have already linked responsibility with the taking of a self-critical attitude. Here I would like to pursue the proposal that self-criticism involves a process of unlearning (Habermas, 1987), that is, of making our

pre-understandings the subject of reflection. In other words, self-criticism as a process of unlearning is crucial to reflexive learning and in part to the practice of reaching maturity. A discussion of the concept of ecological enlightenment in the context of maturity and human possibility follows.

1.11.1: Moral Maturity and Sustainability

The development and adoption of more ecologically sound modes of existence, of knowing and of societal organization must necessarily begin with a process of self-criticism and unlearning, although it must not be restricted to "a critique of deformations" (Habermas, 1987, 400), but must also involve the opening up of pre-understandings - "non-reflective modes of thought" (Foucault) - to critical reflection. The unthought can be brought to consciousness, as was Montaigne's practice, by reflecting on contradictions and by comparison with the thought frameworks and practices of other cultures. However, as Habermas (1987, 400) advises, there is a need to comprehend not only "the learning processes that separate 'us' from 'them', but also to become aware of what we have *unlearned* in the course of this learning".

In referring to pre-understanding we are talking here of those "nature-like" characteristics of the social order, which have the capacity to legitimate themselves and are apparently immune to criticism (Ashley, 1990, 95), for "[t]hat which stands beyond all doubt seems as if it could never become problematic" (Habermas, 1987, 400). Included here are Habermas's steering media, money and power, and property relations, the latter to be the subject of Chapter 4. Self-criticism also involves recognizing and examining the social values underlying the philosophical assumptions of social organization and reproduction. The survival of these underlying social values is critical for the legitimacy of any social order. Thus Kassiola (1990) views self-criticism in the contemporary context as a process for ridding ourselves of the social value of unlimited growth, which, through technological progress, grounds modern industrial civilization. The legitimacy of economic growth as a social value is now under a question mark, with environmental movements acting as the agents of disillusionment.

A self-critical stance encompasses both unlearning and learning responses. To understand where the potential for learning lies, reference might be made to Stephen White's (1990) interpretations of Heideggerian thinking for ethics and politics. By distinguishing a 'responsibility to act' from a 'responsibility to otherness',

we can glean some idea of where our learning is deficient. The former sense of responsibility is implicit in western thinking about politics and ethics.

> It is a sense of responsibility to act in the world in a clearly justifiable way, that is, a moral-prudential obligation to acquire reliable knowledge and act to achieve practical ends in some defensible manner. This responsibility derives from the character of being in the world both physically and politically: from the need to survive physically, avoid harm, conform to time constraints, and meet the expectations of others. Such a responsibility always requires one, at some point, to fix or close down parameters of thought and to ignore particularity and differences among actors. To act in this sense means inevitably closing off sources of possible insight and treating things and people as alike for the purpose of making consistent and defensible decisions about alternative courses of action (White, 1990, 80).

By contrast, the responsibility to otherness embodies a moral-aesthetic sense, which "refers to the need to be attentive to that which lies beyond the margins of our identity, our concepts and our projects" (White, 1990, 81). He is referring here to the neglected dimensions of our experience, which he clarifies subsequently as: "all that precedes, exceeds, and succeeds our purposes and projects" (White, 1990, 92). That which precedes includes underlying values and assumptions and, as was recognized above, bringing these to consciousness requires processes of unlearning. That which exceeds includes the unintended side-effects of our projects and that which serves only utilitarian value, such as nature's provision of resources. That which succeeds includes the generations of living beings to come, whose interests our systems of neoclassical economics and democratic politics are unable to take into account.

The learning processes with which we are concerned therefore involve acknowledging the unacknowledged costs of modernity's learning projects, which have been principally directed towards the accumulation of rational knowledge in order to solve the problems confronting us. Where Heidegger differs is in pursuing a learning process which is not cumulative, but a 'becoming aware', a 'recollecting' of all that is shunted aside and suppressed in modern consciousness. His learning is a sensitivity to otherness which continuously recognizes our finitude (White, 1990, 92) and therefore bodily experience, particularity and those aspects of human experience denied by the rationalist turn of modernity and its performative ethic. Learning sensitivity to otherness must necessarily mean accepting human imperfectibility and fallibility and hopefully will result in modesty about our capacity in the design and implementation of political and economic projects. The process of reaching moral

maturity or keeping the responsibility to act in "fruitful tension" (White, 1990, 81) with the responsibility to otherness means adopting a sceptical, self-critical attitude, which brings to consciousness unthought, received truths and therefore opens up not only previously excluded realms of human experience but also human possibility.

We might further explore the meaning of maturity by referring to what it meant for Kant and some subsequent theorists in the context of enlightenment. The challenge for Kant was to develop a radically new understanding once the received truths of religion and metaphysics had lost their philosophical force.[16] He viewed enlightenment as a release from "self-incurred tutelage", that is, the inability to make use of one's critical faculty, understanding, without reference to or guidance from another. Maturity consisted in having the courage - *aude sapere* - to use one's critical rationality in order to examine that which is beyond all doubt, those values/assumptions which reassure us with the comfort and certainty of existing practices. Immaturity is therefore moral incompetence or refusing to take responsibility for the exercise of understanding, being comfortable with the tutelage of another.

However, for Foucault (1984), who also visited the question of enlightenment, Kant's heroic stance, or what he called the "modern ethos", was only partly mature. Maturity also consists in adopting "an ironic stance towards one's present situation. ...The ironic stance results in seeking in the present those practices which offer the possibility of a new way of acting" (Dreyfus and Rabinow, 1986, 117). If these authors are correct about Foucault's development of "a new ethical form of life which foregrounds imagination, lucidity, humour, disciplined thought and practical wisdom", then perhaps the recovery of Montaigne's insights is assured.

1.11.2: Ecological Enlightenment

At this juncture we might apply some of the insights gleaned from Kant and Foucault on enlightenment to *our* current historical era. Beck (1995b) has attempted a reinterpretation of the Kantian notion of enlightenment for this era of ecological risk. He defines ecological enlightenment as 'taking charge of oneself' and living through our experiences; "[d]iscovering and overcoming the standardizations in one's own life and thought, thinking and living 'against the grain of one's own certitudes', become an individual learning process" (Beck, 1995b, 57). It entails taking

[16]Kant's seminal ideas on enlightenment are contained in a letter to a Prussian newspaper conceived as a response to the newspaper's challenge to theorists to produce a definitive statement on what was a contemporary burning issue. It is simply titled *Was ist Aufklärung?* (What is Enlightenment?)

responsibility for the self, for 'being-in-the-world', and just as Kant's enlightenment demanded a radical break with religious and metaphysical order, so too ecological enlightenment requires that an heroic break be made with the certainties and securities of industrial society. The heroism of ecological enlightenment requires breaking the faith with science and technology as the only possible sources of solutions to the problems that confront humankind. It also means responding to the challenge of developing a radically new understanding of what it means to live in an era of ecological uncertainty and acknowledged biophysical limits.

Taking responsibility may be defined in part as the application of reason to the conditions of contemporary reality, that is, the use of critique. Thus, just as Kant's treatise was a contemporary reflection on his enterprise (the bringing of enlightenment), so too it can be argued that the environmental critique is a contemporary reflection on the legacy of that enterprise. Kant was of the opinion that once freedom was granted, enlightenment was sure to follow. Unfortunately we are neither free nor mature.

However, Beck does interpret glimmers of enlightenment in the subcultures, where experimentation with non-traditional roles and forms of self-expression indicates that "a consciousness of freedom is forming" and a politics based on the defense of encroachments on one's personal experience. He divines in these moves "the beginning of a new ethic, one that relies on the principle of duty to oneself - ... as the expression of an effort to bring the individual and the social back into harmony, in flowing projective, social identities" (Beck, 1995b, 57). Beck's ecological enlightenment involves humanity's transcendence of its prevailing image ("which is built into thought and action and which grows out of social roles and circumstances") to one that is "open and changeable". By extrapolation, this is a humanity that gives up on certitude, opens itself to the "ubiquity of the finite"[17] and then is in a position to approach maturity.

So much for the heroic aspects of ecological enlightenment, but Beck has not addressed the ironic, which Foucault suggests is also part of attaining maturity. Again it is in the practices of the subcultures, and I am particularly referring to new social movements, where we might find hints of new possibilities of acting. It is their symbolic politics, unconventional forms of political action, participatory forms of political organization, and postmaterial value systems, what Dreyfus and Rabinow (1986, 117) refer to as "an abandonment of traditional seriousness while preserving

[17]For the origin of this phrase, see White (1990, n.45).

active engagement in the concerns of the present", that constitutes the ironic stance of the new social movements. Chapter 2 will further explore these aspects of the new social movements and their contribution to a new political and social consensus.

1.12: The Biological Metaphor

The modern social order had as its model of organization the mechanistic notions of Newtonian physics. Thus for Hobbes the solar system provided the model for his Leviathan state with the king (the seat of centralized power) akin to the sun at the centre of the planetary system around which the planets, akin to the different parts of society, revolved in their precise elliptical orbits. This model promised stability of institutions, an unambiguous social structure with different races, classes and genders occupying fixed positions, centralized power and sovereign states. As Toulmin (1990) remarks, it might have been a useful social structure for restoring order after the Religious Wars, but its rigidity, hierarchy, standardization and uniformity are not appropriate to problems which are global in extent and highly differentiated in nature.

1.12.1: The Challenge of Ecology

This is precisely why some writers perceive the ecological model with its notions of diversity and connectivity as a more appropriate model for organizing social order and understanding our problems. However ecology does more than provide a model for social organization. It also raises some fundamental issues about cosmology, that is, about the order of nature and our place in it. The fact that the activities of humankind are having such a far-reaching impact at both local and global levels implies that we can no longer view nature as nothing more than the "fixed, causal backdrop" (Toulmin, 1990, 191) to an unfolding human drama. Evolutionary biology has taught us that nature has its own evolutionary history and the challenge for modern humanity is to see itself in this longer-term context.

Additionally and most importantly, ecology raises questions about how to restructure the scale and functioning of human practices and institutions (Coles, 1992, 194). It offers a way of understanding and building social order based on a biological rather than a mechanical understanding of structure. The Newtonian model was grounded in concepts like atomism (as in individual rights and consumer sovereignty), independence, linear progress, closed systems, and equilibrium conditions. It was a model of order and stability. By contrast, ecology is

underpinned by notions of systems, interdependence, parallel progress, open systems and mutability. Systemic behaviours are characterized by adaptability, diversity and differentiation, recognize multi-factorial causes, and pay attention to the particular and to interrelatedness (Mulgan, 1997, Ch.9).

The machine metaphor begins to lose its purchase in a world where systems of governance and organization clearly are no longer bounded - the idea of the nation-state with its fixed geographical boundaries is now discussed in terms of its demise (Ali Khan, 1996) - and there is increasing multiplicity of connections. "The multiplication of connections makes for greater uncertainty and speed of change, which requires adaptability rather than only efficiency" (Mulgan, 1997, 174). The most effective organizations encourage rich information flows, as a result of which there is no longer the need for centralization of information along the lines of the military model. As I shall discuss in Chapter 2, these developments in understanding are significant for the organization of democratic politics.

The atomistically organized society consisting of independent, relatively homogeneous units is replaced in the biological metaphor with the notion of the self-organizing or self-creative society, where habits of obedience and respect for power are replaced by "a high ethical premium on truth (since misleading information would blunt the system's capacity to adapt) and on responsibility (since distributed intelligence must also mean distributed responsibility, culpability and worry)" (Mulgan, 1997, 180). The main principle governing interaction at all scales of organization is that of reciprocity, not the dependence which characterizes the machine order. One of the attractive intuitions of the self-creative society is that the good of the individual parts is consistent with the good of the whole. This therefore relieves the tension, which is heightened in modern societies, between individual freedom and the collective good.

In sum then, the uncertainties generated by industrial modernity - risks, ecological hazards, time-space compression, information overload and dispersal - cannot be addressed by the rigidity and centralized power structures of the mechanical model which were more appropriate to simple modernity (Beck, 1994, 32). What is needed of human systems in this particular era is adaptability, flexibility and tolerance. Under these conditions the biological metaphor is seemingly more appropriate and more consistent with the realization of human possibility.

1.12.2: The Dangers of the Biological Metaphor

Notwithstanding the attractions of biological metaphors, there are dangers - "transaction costs" (Hodgson, 1993) - in appropriating biological/ecological concepts to the understanding of human systems. We need to be watchful that we do not replicate the errors that resulted in the mechanical model becoming a straitjacket to understanding for we could be similarly saddled with "an oppressive rhetorical model" based on ecology (Toulmin, 1990, 194). In the modern period the earliest use of biological concepts to explain human organization was that of Bernard Mandeville in the eighteenth century (See McKendrick, Brewer, and Plumb, 1982). Mandeville's treatise on the productivity of a beehive was used to justify the pursuit of self-interest and individual greed and was in a sense an apologia for early capitalist interests. His utilization of the beehive metaphor supported his argument that public virtues could spring from private vices and that social good was the result of each individual pursuing his own selfish interest.

Darwin's notion of natural selection has had a history of selective use in economic theory, largely related to maximizing notions - to support the neoclassical hypothesis of profit maximization; later as an argument for efficiency; and ultimately for the idea that the process of natural selection should lead to 'rational economic man' (Hodgson, 1993, 29). Hodgson (1993, 29) notes the lack of fit between maximization and evolutionary history, with its "imperfect, incremental adjustments". He goes on: "Rather than unrelenting competition and improvement, organisms 'satisfice' rather than maximize: they find niches to protect themselves from competition". Competition and survival are not necessarily synonymous as assumed by sociobiologists.

One unfortunate outcome of drawing parallels between the natural and human worlds is that perpetrated by the Social Darwinists, who made an error of profound and long-lasting significance. This was a case of understanding in the economic sphere being translated to the natural world. The Social Darwinists assumed that the individualism and greed of modern competitive capitalism was universal in both spheres and "by seeing capitalism in nature, the capitalist system was deemed to be 'natural'. It was hence regarded as both inevitable and superior to all systems" (Hodgson, 1993, 31). This supposed naturalness of competition and individualism, which has been used to legitimate social and economic inequality and hence oppression, has been revealed as only one of many survival strategies used in nature.

Cooperative strategies both within the same species and between different species are equally valid strategies.

Ecological concepts, too, have had a chequered history. The eugenics movement, which had its origins in 'survival of the fittest' notions, reached its apogee in the Jewish exterminations (Bauman, 1989). Eugenics was married to the Germanic sense of 'volk' - blood and soil - and formed the foundation of fascist Nazism. The case of Martin Heidegger exemplifies the double-edged sword that is ecology. He has much to offer contemporary ecological thought, but his work and ideas have also been implicated in the horrors of Nazism (Bramwell, 1989). Values derived from ecology have the capacity to inspire a fundamentalist, reactionary and nationalistic Romanticism as well as a progressive, environmental politics (Harvey, 1993, 16-19). The trick is to remember the "Nietzschean presumption of resistance", that in every human enterprise there is "an element of resistance and recalcitrance" (Connolly, 1988, 169). Nietzsche's primary contribution in this respect is the insight that modern thought has two inclinations, mastery and resistance. The corollary of any will to power, such as the mastery-of-nature project or the search for harmonious community, implicitly harbours a discordant impulse. Any set of standards or norms will have contrary suppositions because existence is inherently ambiguous. Progressive social change can only occur when this "persistent strand of recalcitrance in human beings and the world to every consummate project of mastery and realization" is recognized (Connolly, 1988, 173).

1.13: Changing Frames: Thinking Dangerously

Nature as ecology is engaged in the project of unsettling "the settled patterns of thought" (Connolly, 1988, 6). The modern framework for understanding nature has focussed around "how to master it" rather than "whether to do so" (Connolly, 1988, 4). Ecology challenges the *thoughtlessness* of modern thought by problematizing its underlying understandings and values - including questions of individual freedom and responsibility, utility versus the intrinsic value of nature, and rationality versus reasonableness among other assumptions. In questioning received truths about the mastery-of-nature project, ecology functions to retrieve those normative aspects of thought so occluded, that is, the "whether to do so".

Moreover, problems of ecology - the greenhouse effect, ozone depletion and nuclear accidents - have assumed a global dimension which itself engenders a different way of thinking; what Moscovici (1990, 17) calls a "practical universalism".

Although the causes of global problems may have local origins, their global dimensionality means that no one is immune from them and they must be confronted on a global scale. Practical universalism is distinguished by "a common set of emotions across a range of publics" and a "universal intelligibility". The implications for individual disciplines of thought are potentially quite profound.

The order achieved through the mechanical metaphor in early modern societies was achieved at considerable cost, in that all that did not fit into its narrow confines was treated as a source of disruption, including women, foreigners, the mentally ill and nature. These categories constituted the other, "matter out of place in need of punishment, reform or destruction" (Moscovici, 1990, 14). The natural unity of the clockwork model has been shattered by the emergence of social movements, representing the interests of various categories of otherness. Ecology movements, for example, have been responsible for returning unruly nature to ethical thought, thus undermining the utility myths of modern society. Moreover, they are also responsible for demonstrating that the mastery framework of thought is on "a self-defeating trajectory", for its project "demands too much from nature, from the self, from the collectivity or from the world outside the charmed circle of highly modernized states" (Connolly, 1988, 173).

The role of ecology and ecology movements is to highlight the dangers of the current trajectory and its systems of organization. To do this they must expose the paradoxes, ironies and contradictions of modern existence and of the thought frameworks which shape our understandings. The tradition of thought prefigured by Montaigne and carried on by Hume, and by Nietzsche and Foucault in their genealogies represents a rich resource.

1.14: The Ecological Order and Sustainability

The mechanical/rational order was fashioned around systems which emphasized stability, predictability and security. The form of politico-economic system which evolved to satisfy those criteria, liberal democratic capitalism, is a strategy of transcendence, which is now being revealed in its vulnerability. Its assumptions of continual expansion of its resource base and of market demand are revealed as unsustainable, while its capacities to respond to perturbation - that is, market adjustment of individual preferences and incremental political reform - are being exposed as limited responses (Dryzek, 1987).

In response to the perceived deficits in its value assumptions, its categories of understanding and its organizational forms, alternative epistemologies, value constructs and organizational forms are being pursued in order to address that quality which seems most pressing in this era of general crisis, sustainability. The stability which most concerns the present era is that associated with ecological integrity, minimizing ecological disturbance and potential catastrophe. However, as Blake (1990, 80; see also Pierce, 1992, 312) shows, sustainability not only refers to the condition of the biosphere. It has a crucial social dimension, for, he argues, "a sustainable society can only exist if its constituent social structures are capable of limiting biophysical change within the thresholds of ecological stability, while also providing adequate opportunities for meaningful human existence".

A number of writers, such as Daly and Cobb (1989), have differentiated weak and strong forms of sustainability, the dimensions of which and their normative content will be more fully explored in Chapter 3. Strong sustainability is indicated when risky actions prejudice the welfare of future generations, even though these actions yield benefits to future generations (Howarth, 1995). Strong sustainability is an appropriate ethical stance when risk-producing behaviours are productive of uncertainty. The ideology of growth is just such a stimulus to risky behaviours and therefore to the creation of uncertainty. "This arises from the fact that the development process involves changes in the size and quality of, and relations between, natural and human-made capital. With these changes, the margins of resilience change and in turn so does the system's susceptibility to surprise events from external or cumulative shock" (Pierce, 1992, 308).

There is a strong consensus that sustainable systems embody resilience as a principal quality, although there is some disagreement over its exact meaning. Dovers and Handman (1992), for example, perceive resilience as that characteristic which sets sustainable systems apart from the rigid systems of industrial modernity. The main difference between rigid and resilient systems is that while industrial systems exhibit "high levels of information and system and subsystem control in the face of low levels of change" (Dovers and Handmer, 1992, 276) and are resistant to change, resilient systems have the capacity to adapt to changing conditions. Pierce (1992, 308) argues that the effect of growth has been to reduce the resilience of both natural and social systems. Hence we are confronted with declines in margins of resilience through land degradation, desertification, loss of biodiversity, ozone depletion, and global warming to the point where some ecosystems, particularly in Africa, are threatened with imminent collapse.

The differences in meaning turn on whether resilience is considered a necessary or contingent criterion of sustainability, whether it refers to the ongoing maintenance of system conditions or whether it applies only under conditions of severe disequilibrium. Dovers and Handmer (1992, 266) describe *resilience* as "the ability [of a system] to absorb changes to key variables and parameters and persist", a definition which appears to overlap Dryzek's concepts of *robustness* and *flexibility* with regard to social choice mechanisms. Robustness consists in the "ability of a mechanism to perform well across a wide variety of conditions", that is, its *steadfastness*, while flexibility refers to the ability of a mechanism "to adjust its own structural parameters as changing conditions demand", in other words, its *adaptability* (Dryzek, 1987, 51-52). Adaptive mechanisms have the capacity to absorb new feedback devices in order to respond to novel signals and to establish new forms of co-ordination, a capacity in which some self-perpetuating, modern organizational forms, that are resistant to change, are singular failures. Markets, for example, are highly robust, but only in the sense of being resistant to change. Their main elements, exchange relationships (competitiveness, self-interested behaviour, and consumer sovereignty), private property, interest rates, and the positive feedback stimulus of economic growth, act to reinforce expansionary tendencies at the expense of ecological integrity. Capitalist markets are flexible in the sense that they can adapt quickly to changing market conditions by varying the mix of goods and services, but their inherent logic precludes reductions in growth.

For Dryzek resilience is a criterion which applies only after severe perturbation. It is "the ability of social choice mechanisms to steer human and ecological systems back to normal operating range" (Dryzek, 1987, 52-53) under conditions of severe ecological stress. In ecosystems, resilience refers to the ability of the ecosystem to steer itself back to equilibrium.

Whether it is interpreted as a maintenance function or a contingent criterion of sustainable systems, the preoccupation with resilience suggests that human and natural systems are in extreme disequilibrium and the present unsustainable trajectory of modern societies makes the consideration of their resilience that much more pressing. It is also a recognition of limitations to knowledge, of the need to enfold uncertainty into institutions and practices and of the need to build capacities to respond to unanticipated shocks.

What is clear is that conditions of rapid change are becoming the norm. Under these conditions the objective of any system should be to reduce its vulnerability. Dovers and Handmer suggest that the type of resilience which would afford this capacity is characterized by openness and adaptability. Resilience premised on either resistance to change or on incremental change as a response to ignorance and uncertainty would not serve any system well in the face of external shocks or substantial internal disorder. A society that was open and adaptable would exhibit a high degree of flexibility, that is, be able to vary its basic operating assumptions and thus adopt more appropriate institutions and practices. As Dovers and Handmer point out, societies have always adapted to changed circumstances, but often slowly and painfully. However, adaptable societies would minimize the pain and move quickly to more sustainable operating conditions (Dovers and Handmer, 1992, 270).

Interdependence is another of the categories of understanding that authors have borrowed from biological systems, superceding the mechanical understanding, which favours sovereign, independent and self-sustaining individual units. The notion implies a multiplicity of connections and the recognition of interconnection has taught us that technological problem-solving has distinct limits, that problem-solving in one sector of a system can very well lead to the generation of externalities in other sectors or other systems, a phenomenon known as problem displacement. It is because of interconnections within and between systems that human and natural systems both require co-ordination among actors and across actions (Dryzek, 1987, 48).

By the same token it is as a result of the technological facilitation of interconnection that we are now more aware of our interdependencies; that we are connected through our common dependence on global climatic systems, through information flows, through the possibility of nuclear disaster, through global money markets and through global tourism, and that the world's systems are no longer self-contained (see Mulgan, 1997, Ch. 1 on burgeoning interconnection). Mulgan (1997, 33) sees the openness resulting from connexity and greater information flows as an adaptive advantage similar to that conferred on humans in the early evolution of the human brain, "which grew and grew because of the cumulative adaptive advantage it conferred, an advantage that was different in nature from having bigger teeth or muscles". It is only an advantage however if greater communication means more mutual understanding and trust, the basis of openness.

Value systems inherited from earlier times of relatively plentiful resouces and the unsustainable behaviours that they sanction are also under question. The moral order of modern society, which concerned itself principally with individual rights and therefore revolved around questions of justice rather than morality, has been found wanting. It is a moral order relevant only to the immature, egocentric individual, not to wider concerns of inter- and intragenerational equity or to ecological integrity. The morally relevant stance of a mature modernity is ecological responsibility. It is the reverse of self-assertive transcendence. Ecologically responsible behaviours acknowledge both "transcendence" and "immanence", that humans as a species impact on ecosystems, creating their own ecosystems and being created by them; they are modest with respect to human rational capacity and respect the limits of human knowledge; and they exhibit humility and foresight with respect to the consequences of human projects. Ecological responsibility transcends the false humility of immanence-nature knows best, which, in the absence of human interests, would be true. But, as (Dryzek, 1987, 45) observes:

> While the protective and waste-assimilative aspects of anthropocentric ecological rationality may be best served by leaving nature well alone, the productive aspects will not be. Production for human use demands artificial suppression of ecological succession.
>
> Ecological rationality in the human interest demands some compromise between productive artificiality and waste-assimilative/protective "naturalness".

In this case humans co-operate with biophysical processes, making use of "the spontaneous self-organizing and self-regulating qualities of natural systems" (Dryzek, 1987, 46).

The ecologically responsible society incorporates self-reflective and self-critical capacities, monitors its values and assumptions, and is mindful that human potential consists in more than economic rationality and mastery of nature. Individual ecological responsibility is about taking charge of oneself and for one's being in the world. Ecological responsiblity is both an individual and a collective requirement to choose the means of fulfilling our needs which "take account of the interests of life on our planet and the rights of future generations" (Lipietz, 1995, 45).

CHAPTER 2

THE PUBLIC SPHERE RECONSIDERED:

ITS REPOLITICIZATION AND REMORALIZATION

> The invasion of the natural world by abstract systems brings nature to an end as a domain external to human knowledge and involvements. The tremendous extension of human control over nature (which, as in other areas of control, yields new unpredictabilities) comes up against its limits, however. These consist not so much in the environmental degradation and disruption that is thus brought about, as in the stimulus to reintroduce parameters of debate external to modernity's abstract systems. In other words, repressed existential issues, related not just to nature but to the moral parameters of existence as such, press themselves back on the agenda. The process is not an automatic one: on the level of everyday life, as well as in collective struggles, moral/existential problems are actively recovered and brought forward into public debate (Giddens, 1991, 241).

2.1: Introduction

The complexities and inherent contradictions of industrial modernity have opened up the space for the repoliticization of many spheres of existence and for the reintroduction of moral/existential questions to political agendas. This space is being occupied by the new social movements which have emerged during the last thirty years, largely as a result of disillusionment with the unfulfilled promise of modern life. They include nuclear disarmament, peace, feminist and ecology movements, although more recently, other, more regressive movements have also consolidated in this space. The feminist movement, in particular, has concerned itself with challenging the exclusive nature of the arena of labour and politics known as the public sphere, from which women have been systematically excluded while simultaneously being confined or, more correctly, relegated to the domestic or familial sphere since the emergence of a critical public in the eighteenth century. The inequity of the public/private split for women and its oppressiveness for both men and women has occupied much feminist theorising over the last several decades.

Ecofeminists, in particular, have been concerned to problematize the intrinsicality of the domination and oppression of women and others in the dualisms of modern life and to expose their inextricable relationship to the domination of nature (King, 1981; Plumwood, 1993; Warren, 1990), while demands for the promises of the Enlightenment to be made good and the promised rights and entitlements extended to all citizens encompasses claims for the full democratization of the political domain. Thus the concern for ecological devastation and degradation has functioned to reopen moral/existential questions for public debate, such as how one should conduct one's life, thus making the personal political, or as Giddens (1991, 224) would have it, making for "a remoralising of social life". I intend to argue that, as social movements have been the principal vehicle in opening up the political by reintroducing moral considerations to the political domain, they are the

descendants of the 'critical public' which Habermas (1989, 260) described as emerging during the Enlightenment. However, in extending the meaning of the political and applying it to all arenas of existence, not simply confining it to the formal arena of public debate beyond the workplace, the economy, the administrative apparatus of the state, and the domestic sphere, it could be argued that social movements, as products of Beck's (1992) reflexive modernity, are engaged in a radical reconstitution of the public sphere and hence are agents of profound social change.

In arguing for social movements as agents of radical social and political change, I initially examine Habermas's case for the criticality of the bourgeois public of early modernity and its subsequent transformation in the nineteenth and twentieth centuries, wrought largely through its flawed and contradictory nature, which was revealed by the inequities of nineteenth century industrial capitalism, when those systematically excluded from this elite public sphere, women, workers and the colonised, demanded an extension of its inherent rights of freedom and equality for themselves. It is paradoxical that while this century has witnessed the formal extension of the claimed freedoms, the critical public exists in reality only as an ideal. However the excluded and oppressed still view the public sphere as the arena for emancipatory politics and hence for achieving freedom from their oppressions. For Giddens (1991), emancipatory political spheres are critical arenas in which to openly debate life politics issues, while for Beck (1992, 186), it is here that the non-political is politicised and the political is repoliticised. I also explore how contemporary radical movements are helping to reconstitute the public sphere through its repoliticization and by extending the meaning of the political to add moral/existential questions to the political agenda, including many issues once thought only relevant to the private sphere of domesticity and economy.

2.2: The Critical Public

The public sphere has been theorised since its inception during the Enlightenment. Kant, for whom the public sphere was the means of enlightenment, both for the individual and humanity as a whole, provided the first full philosophical apologia of the bourgeois public, while Hegel, in recognising its contradictions and the lack of substance in its claim to be free from domination, was its first critic. Marx advanced Hegel's critique further and, in showing that the old authoritarian relations of power had been simply replaced by a new set between owners of capital and wage earners, demolished the fictive freedoms on which the ideal of the public

sphere of civil society was based. The critical theory project of the Frankfurt School, exemplified by the work of Adorno and Horkheimer, continued the Marxist critique in the twentieth century but ran into a pessimistic impasse, no doubt provoked by its emergence during the dark times of Nazi fascism. As an antidote to their pessimism, Habermas set out to recover what was of value in democratic public life - the potential for the coordination of human life through public discourse - framing his theory in a full consideration of the changes that had been wrought in the public sphere by capitalism and by state structures since the beginning of modernity.

The 'critical public', which emerged in European cultural and political spheres in the seventeenth century reaching its apogee in the late eighteenth century, was an arena defined outside the courtly life surrounding the monarchy, outside the familial sphere of family and friends and supposedly separated from the arena of economic production. Its appearance coincided with the rise and institutionalization of the liberal ideals of equality and liberty and in fact it was a key institution in the liberalizing process. Habermas's important work, *The Structural Transformation of the Public Sphere*, has been this century's most significant contribution concerning this particular historically situated sphere of political action. Habermas's task was to define the emergence of a particular public, the bourgeois public, more specifically the *liberal* model of it, and to chart its transformation. He acknowledged the brief appearance of a plebeian public sphere at around the same time but chose to ignore it as simply a variant of the more dominant form which, with the exception of various workers' movements, was largely eclipsed and, as he observes, "remains oriented towards the intentions of the bourgeois public sphere" (Habermas, 1992a, xviii). From such a critical appraisal he hoped to recover its inherent emancipatory potential, despite the flaws introduced by its subsequent historical transformation. This emancipatory potential was to be found in the use of practical reason in public decisionmaking and in democratic politics, the health of which is dependent upon "both quality of discourse and quantity of participation" (Calhoun, 1992a, 2). Habermas's view was that the quality of discourse declined over the intervening period.[18]

Habermas's bourgeois public had its origins in the High Middle Ages, and probably it could be said to be a logical outgrowth of the humanism which the

[18]This conclusion has been recently disputed by Schudson (1992).

Renaissance had spawned several centuries earlier[19]. It made its appearance at the same time as mercantilism created a new sphere of regulative authority separate from court and monarch, occupying the interstices between state and society (Habermas, 1989, 30). In this sense it differed from the earlier classical Greek public, where the public included the apparatus of state (Calhoun, 1992a, 8). It consisted of private individuals who had come together to generalize their interests through the medium of public discussion and perhaps to demand state action. Habermas (1989, 27) describes it thus:

> The bourgeois public sphere may be conceived above all as the sphere of private people come together as a public; they soon claimed the public sphere regulated from above against the public authorities themselves to engage them in a debate over the general rules governing relations in the basically privatised and publically relevant sphere of commodity exchange and social labour. The medium of this political confrontation was peculiar and without historical precedent: people's use of their public reason.

What was radical about this particular public was its 'critical' nature. Habermas locates this criticality in the effects that mercantilism wrought, as changes in the private household economy decreased the importance of local markets and increased dependence on extralocal (that is, regional and national) ones. Local economic self-sufficiency dwindled, whilst the populations of cities such as London and Paris grew dramatically. It was these new urban dwellers on whom the widening regulatory apparatus of mercantilist policy had the most direct effect, that is, by increasing their dependence on extralocal markets and in the taxes and duties on their daily rations (McKendrick et al., 1982, 199). The public authority was inevitably going to be called upon to legitimate itself:

> Because, on the one hand, the society now confronting the state clearly separated a private domain from public authority and because, on the other hand, it turned the reproduction of life into something transcending the confines of private domestic authority and becoming a subject of public interest, that zone of continuous administrative contact became 'critical' also in the sense that it provoked the critical judgement of the public making use of its reason (Habermas, 1989, 24).

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[19]See Carroll (1993, 102-116) for a description of the cultural and historical background to the emergence of the bourgeois form, a product of the fusion of humanism with its ideals of reason and free will and secularized Protestantism.

Although, obviously, there would have been a great deal of juggling of interests among the participants in this realm of public debate, what was significant was that it established a rational-critical discourse on matters of public interest in areas in which the quality of the argument rather than the quality or the status of the arguer was the essential criterion. The critical essence of the bourgeois public was directly related to increasing levels of literacy, a product of the formation of bourgeois culture which placed a high value on education as the means to improve the world "by exercising and training man's highest and defining faculty, his reason" (Calhoun, 1992a, 108). The members of the critical public were first of all readers drawn from the ranks of the propertied and the educated, who gathered together in the various coffee-houses and clubs to debate and to read (both of these activities being advanced by the explosion of critical journals and periodicals) and, in the process, to attain enlightenment. Thus "in the *Tatler*, the *Spectator*, and the *Guardian* the public held up a mirror to itself" (Habermas, 1989, 43).

2.2.1: The Transformation of the Critical Public Sphere

For Habermas the full potential of this eighteenth century public was never realized and its critical moment lost. In fact it was subverted from within when the tensions inherent within it inevitably surfaced. Firstly, as individual freedom was construed synonymously with property ownership and its accompanying rights, its underlying principles of equality and freedom became intimately linked with and subservient to emerging capitalism. Freedom thus assumed a negative rather than a positive form; it was a freedom from constraint and so it largely remains. By the nineteenth century its flawed nature, particularly its various exclusions and inequalities involving the franchise and ownership of the means of production, were revealed as the inequities of industrial capitalism. Yet those who had been systematically excluded - women, workers and the colonized - persisted with their claims for the rights guaranteed to members of the bourgeois public sphere, rights to its various freedoms and to equality.

Secondly, the progressive widening of the boundaries of the public sphere resulted in a decline in the quality of rational critical debate, its supplantation by the consumption of culture, and equally importantly, the replacement of objective general interest with negotiated interest. The public sphere largely lost its rational-critical function and the exercise of political power became confined to behind-the-scenes horse-trading between bureaucratic organizations, political parties, special

interest groups and governing executive elites. It has thus become depoliticized; its sole political function is as a sphere of public acclamation.

The potential of the public sphere was also undermined by the smudging of the once distinct boundaries between public and private, that is, between state and society, as private organizations assumed public power and the state intervened in the private sphere, for example, in the promulgation of labour laws. Simultaneously, the relationship between the private intimate/familial and the private economic spheres underwent polarization as the family became divorced from its close relationship with the realm of production and reoriented towards consumption. This coincidence of the replacement of rational critical discourse by an orientation towards consumption and of general interest by negotiated interest meant that the members of the public sphere were no longer able to discern a common ground. Rational critical debate has become more difficult in a public sphere generated by the mass media, which, in concentrating on personalities and personal attributes, finds it impossible to bracket personal qualities as required in the critical public[20]. In sum, what Habermas has charted is "the depoliticization of the public sphere and its impoverishment by the removal of critical discourse" (Calhoun, 1992a, 24).

Working from a base in psychology, Richard Sennett (1976) portrays a similar decline in public character, suggesting an association between strong public spheres and times of uncertainty. Thus the eighteenth century bourgeois public sphere grew in response to "material changes in population and demography" and persisted in modern times as "a tool for attempting to preserve order in the midst of much greater material shifts in the city", but by the end of the last century, when material conditions had become more certain, the public world had become less stable (Sennett, 1976, 141). He too attributes the erosion of public life to the rise of industrial capitalism with its homogenizing tendencies, to increasing secularity, and to the persistence of *ancien regime* forms of publicness: "The legacy of the *ancien regime* city was united to the privatizing influences of industrial capitalism" (Sennett, 1976, 23).

The economic upheaval and uncertainties generated by industrial capitalism caused people to look for ways of protecting themselves from the resulting traumas. Increasingly the family was seen as a source of idealized refuge, a refuge that

[20]Habermas does not distinguish sufficiently between his ideal and the actual eighteenth century bourgeois public. From a reading of Sennett (1976), it could be concluded that the early capitalists and mercantilists were very definitely engaged in attending to their own interests. Habermas (1992, 463) has acknowledged this criticism in recent years.

nurtured a higher moral character than the public realm, whose legitimacy was thus called into question. Public life became more and more emaciated so that by the end of the nineteenth century people had become merely spectators in the public sphere. Participation with strangers through critical discourse for social ends had degenerated into "passive culture consumption" and "apolitical sociability" (Calhoun, 1992a, 23).

Both Habermas and Sennett see the legacy of nineteenth century industrial capitalism and secularism reflected in the weak public sphere of this century:

> The obsessions with selfhood are attempts to work out these conundrums of the last century, by denial. Intimacy is an attempt to solve the public problem by denying that the public exists. As with any denial, this has only made the more destructive aspects of the past the more firmly entrenched. The nineteenth century is not yet over (Sennett, 1976, 27).

Habermas's conclusions on the transformation of the public sphere are similarly paraphrased by Calhoun (1992a, 26) thus:

> By means of these transformations, the public sphere has become more an arena for advertising than a setting for rational critical debate. Legislators stage displays for constituents. Special interest organizations use publicity work to increase the prestige of their positions, without making the topics to which those positions refer subjects of genuine public debate. The media are used to create occasions for consumers to identify with the public positions or personas of others. All this amounts to the return of a version of representative publicity to which the public responds by acclamation, or the withholding of acclamation, rather than critical discourse.... The public sphere becomes a setting for states and corporate actors to develop legitimacy not by responding appropriately to an independent public but by seeking to instill in social actors motivations that conform to the needs of the overall system dominated by those states and corporate actors.

Habermas (1989, 201) refers to the institution of this new version of representative publicity (the *ancien regime* form of publicness) as the "refeudalization" of society: "The public sphere becomes the court *before* which public prestige can be displayed - rather than *in* which public critical debate is carried out".

As a result of these modifications in the public realm, the role of political parties has been transformed to that of bureaucratic organizations whose sole aim is to attract votes rather than to inform their adherents. Legislators are no longer able to freely participate in public debate; they are bound by the party line and have thus become agents of those political parties: "Parliament is degraded to the status of a committee for the airing of party lines" (Habermas, 1989, 205). To bolster their image, parties contend for the support of special interest groups whom they offer to represent at the negotiating table. These groups, which have their base in the private sphere while operating in the public sphere, also contribute to the interpenetration of state and society. It is this combination of party-dominated politics and the fuzziness of the state/society boundary that makes it seemingly impossible to resurrect the critical public sphere.

What Habermas has demonstrated is that the inclusion of the unpropertied masses in the bourgeois public sphere, that is, the expansion of its democratic base, has not been matched by greater democracy in the way that people have control over the decision-making that effects their lives.

> Indeed, what has precisely characterized capitalist development is that, although the franchise has been extended and the standard of living of most of the population has been raised, more and more aspects of life have become moulded by and subject to the control of abstract anonymous forces over which citizens exercise very little control (Postone, 1992, 165).

It is the new social movements that I intend to examine for the possibility of resurrecting the "kernel" of potential in the liberal public sphere[21], for the issues that they raise are in effect logical outgrowths of inconsistencies unresolved in the early liberal public sphere.

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[21]I have purposely avoided a critique of Habermas's concept of the bourgeois public sphere, as that has been more than adequately achieved by the contributors to the volume edited by Calhoun (1992), although from the standpoint of the present discussion, his neglect of social movements and their importance for public discourse and democratic politics is of some concern. See Calhoun's Introduction to this volume (pp.36-39) for a comprehensive critique of Habermas's failure to accord social movements their due as active agents in the making and remaking of the public sphere, firstly, in tabling new issues on the public agenda and secondly, by restructuring identities, that is, by serving to legitimate new voices in the political public sphere.

2.2.2: Social Movements in Context

Social movements should be seen as part of a socio-historical dialectic. John Galtung (1986) has delineated successive social transformations in the West beginning with the feudal period of the Middle Ages. The first transformation accompanied the revolt of the aristocracy against the Church, which resulted in secularisation of the social order and separation of Church and State. The second transformation was instituted when the mercantilists, merchants and others challenged the absolutist rule of the monarchy and its aristocracy on the basis that the new bourgeois publics which they had created were the sole legitimate foundation for a system of government. The third transformation was generated by workers who had been excluded from the rights contained in the bourgeois publics and from fairness in the distribution of the social product for which they were largely responsible.

However, as Jean Cohen (1983, 103-104) points out "by the time access to public spaces was no longer restricted to the propertied or educated, the institutions of the public realm - parliaments, parties, the press - became functionalized to serve the integrating needs of the economic and political systems. They no longer ambiguously served as the media of self-expression of freely associated individuals". The social movements of this era are thus aligned against a "society defended by nineteenth century economic liberals" and seek to "reconstitute society this time against both economic and political deformation."

Galtung defines a fourth transformation, which he labels the "Green Wave" and in which all those marginalised by the previous transformations - women, ethnic groups, itinerants - similarly claimed a share in the society constructed on those transformations. Contrary to earlier transformative movements, they do not demand a complete revolutionary break from the past. They do however seek to break from those elements of bourgeois and socialist society that emphasize growth and progress at all costs. They are highly politicised with complex networks of local groups and self-help organizations, yet they operate outside the established political structures. In this sense they are radical rather than revolutionary. In Cohen's words:

> They are creating public spaces alongside a political system that has become too rigid or too cynical. The anti-institutional bias of social movements must be seen in the context of the degeneration of institutionalized public spaces into frameworks for elite

> competition or pure struggles of interest and influence (Cohen, 1983, 107).

Alberto Melucci (1985, 789) argues that contemporary movements represent a symbolic challenge and that the field of collective action has shifted from the "political" to the "cultural", to "fields previously untouched by social conflicts (age, sex differences, health, relation to nature, human survival)". However, the challenge to cultural codes has profound implications for the political. According to Cohen (1983, 107):

> one might assess the focus and locus of contemporary movements in terms of the creation from below of a new political culture which could reintroduce the normative dimension of social interaction back into political life. In this sense the new movements are continuous with the first such movement for society against its annihilation by an amoral state (ie., the Enlightenment), described by ...Habermas, and with the movement against an amoral economy (the socialist movement).
>
> The question of meaning - increasingly relegated to the private sphere by a quasi-technocratic, quasi-corporatist political/economic system - is reemerging in the social sphere. It is carried by movements that seek to produce new collective symbols and identities and that could potentially contribute to a revival of political institutional life.

One might therefore characterize the current wave of movements as a challenge against an amoral polity, state and economy for the restoration of civil society.

Claus Offe (1990, 233-234) has similarly categorized the history of social movements as movements about axes of socio-political conflict. He draws an analogy between the situation that confronted labour movements in the late nineteenth century, that is, one of disappointment at the maldistributions and poverty that reflected the limitations of the liberal-bourgeois model based on a market-directed economy, and the state of affairs that now faces late twentieth century social movements, that is, disappointment at the combined achievements of the liberal-bourgeois and socialist movements, which have created a flawed process of modernization that has wide-ranging negative, if unintended, side effects. The axis of conflict has shifted from concerns with freedom, social justice, and economic security to "fear, pain, and (physical or symbolic) destruction vs. integrity, recognition, and respect" (Offe, 1990, 234). What differentiates the latest wave of collective action from previous movements is that it has no ideological basis. Instead

the nature of the critique relies upon "an eclectic application of certain demands and values from the liberal and socialist traditions which are now used as a critical standard against the processes of modernization" (Offe, 1990, 234).

In discussing the mobilizing conditions for collective action, Karl-Werner Brand (1990) similarly identifies three constellations under which "modernization critique" or "cultural criticism" has been generated. He interprets the rising levels of 'crisis and alienation' as a wave of cultural criticism, (Brand, 1990, 41), and, in so doing, is able to discern possibilities for "alternative models of development and social life".

Jean Cohen (1983, 112) also envisages a cyclical process of cultural criticism, in which "the creative acomplishments (of social movements) can be traced in the institutions, socialization processes, and political culture of a society". Indeed movements "raise once again the hope of a post-bourgeois, democratic civil society organized not around market and property or around the state, but in free associations and public spheres penetrating and institutionalizing both economy and polity". She argues that not only do social movements signify a healthy society, but also that healthy movements produce discourses that are capable of being institutionalized and at the same time they contribute to the enlargement of the public realm.

It is my contention that the bearers of this latest wave of cultural criticism will most likely provide the model for a new consensus of political and social life. Before exploring the discernible impacts on the established political, economic and social institutions, it is important to elaborate on the role that contemporary movements play in complex modern societies and what this might mean for the new consensus conceived by Brand. In particular, I intend to explore the potential of the Green Movement to progress the issues that are raised by the current phase of modernization critique and how it might assist in the achievement of a new consensus of political and social life.

2.2.3: Social Transformation and Cultural Challenge

Contemporary social movements are extremely complex phenomena. They are not discrete entities; they have no distinct boundaries; indeed, supporters and adherents may belong to or support more than one movement (Kriesi, 1988, 353). They are not only products of the complex series of social changes that has occurred in the postwar period but they also *construct* reality through the production of new

cultural codes and the creation of collective identities (Melucci, 1988)[22]. "Movements are both the parents and the children of social change" (Pakulski, 1990, 82).

One has to examine the ways in which contemporary movements differ from earlier social movements, such as the workers' movement or the early feminist movement, in order to gain some appreciation of their significance in social, political and cultural terms. Historically social movements have been principally implicated in the struggle for the extension of citizenship and its accompanying rights and with the relationships of domination inherent in the class structures of industrial capitalism, this later concern resulting in the struggle for access to state power. Contemporary collective action is organized around new cleavages of conflict, the focus of social and political conflict thus having moved from industrial work to challenge the dominant social codes which underlie all social relationships in highly complex societies. The new social movements present alternative ways of making sense of the world in contradistinction to the dominant technocratic rationality that increasingly invades and organizes individual and collective life. Their critique of instrumental reason and rationality is a self-reflexive one that employs the arguments and technological forms of the very hegemonic culture that they seek to question. This challenge, which, as we have seen, Melucci (1985) argues is symbolic in nature, has the express effect of "*rendering power visible*, ...a power that hides behind the rationality of administrative or organizational procedures or the 'show-business' aspects of politics" (Melucci, 1988, 250). He has identified three forms of symbolic challenge. Firstly, by *prophesy*, new social movements, in practising alternative world-views in every day life, challenge the dominance of the existing codes of rationality and thereby suggest the possibility of more than one rationality. Secondly, by means of *paradox*, movements reveal through exaggeration and extreme provocation the irrationality and contradictory reasoning of the dominant discourses. Thirdly, through *representation*, by means of various kinds of visual imagery and expressive use of language (video, theatre, written language), the dominant codes are compelled to face their own contradictions.

For Melucci, one of the primary functions of collective action is to create public spaces, in which power can be made visible and therefore negotiated. Power in complex societies is continually shifting and must be continually renegotiated.

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[22]Melucci (1989, 190) argues that other theoretical approaches to new social movements such as Tilly's resource mobilization theory or Smelser's theory of social movements as pathological reaction to crises of modern life obscure their multidimensional character. Cohen and Arato (1992) provide a thorough-going analysis of each of these contributions to new social movement theory.

Thus collective action which makes possible this kind of political discourse is essential for the maintenance of political democracy in complex modern societies. Accordingly, I argue that new social movements not only reflect the complexity and contradictions of modern society but that they also open up possibilities for coping with the contradictions and the uncertainty generated in complex social systems undergoing rapid change.

2.2.4: Complexity: Contradiction and Uncertainty

Complex modern societies are characterized by a high level of differentiation based on abstract systems, but also a high degree of ambiguity and contradiction, of uncertainty and risk, and of rapid change[23]. Central to these tendencies is an explosion of knowledge, particularly technoscience, which has not only brought with it human mastery of both human and nonhuman nature, but also several dilemmas. The most salient of the dilemmas identified by Melucci for the purposes of this discussion is that between *responsibility* and *omnipotence*, "between the urge to extend society's capacity to operate on itself, and the need for responsibility, for recognizing the constraints of survival that bind society to its ecosystem" (Melucci, 1989, 176). Society's unlimited capacity to intervene in both external and internal human nature to the point of self-annihilation through genetic engineering and nuclear science now means that there is a choice for survival rather than a chance of survival.

The function of collective action has been to expose these dilemmas or contradictions to society. It is no accident that many of the supporters of contemporary movements are located in those areas of the system "which are connected to the most intensive informational and symbolic investments and exposed to the greatest pressures for conformity (Melucci, 1985, 796). Offe (1985, 831-832) has identified them as the new middle class, particularly those who work in human service-oriented sectors - education, community services, and health. These actors expose the power structures that control and regulate individual meaning and identity. In complex societies power is often hidden in "the formal rationality of procedures", which suppress from open discussion and societal control many of the questions that affect the everyday lives of individuals, the survival and evolution of

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[23]Giddens (1991, 17-18) prefers the term 'disembedding' rather than 'differentiation', because the former term better captures "the 'lifting out' of social relations from local contexts and their rearticulation across indefinite tracts of time-space" or what David Harvey (1989) calls "time-space compression".

the species, and of the planet (Melucci, 1988, 251; 1989, 177)[24]. The effect of making power visible is to make it negotiable, thus converting previously authoritarian regulations into political relationships, which has, as one of its consequences, the reduction of uncertainty permeating modern systems[25].

Uncertainty as a phenomenon of complex modernising societies is a subject area which has preoccupied Ulrich Beck (1992) and Anthony Giddens (1990; 1991), both of whom argue for the demolition of the myth that scientific rationality will one day bring the contingencies of human existence under human control (Beck, 1992, 71, 156-157; Giddens, 1991, 28). As overspecialization and differentiation in scientific disciplines produce more and more unseen side-effects, the unpredictability of the practical consequences of science increases. The abstract systems of modernity force individuals to divest themselves of traditional notions of fate and to accept risk as an integral aspect of modern life (Giddens, 1991, 31). Thus, "[l]iving in circumstances of modernity is best understood as a matter of routine contemplation of counterfactuals" (Giddens, 1991, 29). Moreover, in the domestic and economic spheres there are similar confusions and uncertainties. In the former, the clear separation of productive and reproductive roles based on the nuclear family is being dissolved, while in the latter, the "interwoven influences of ecology, new technologies and a transformed political culture" (Beck, 1992, 215) produce not only extreme insecurity in the workplace, but also its politicization. On the one hand, an awareness of 'quality of life' issues stimulates workers to negotiate conditions that account for family responsibilities. On the other hand, economic actors are pressured by various actors in the public sphere to justify their organizational and productive processes, thus propelling them into the public arena to engage in "non-economic, *discursive* justification of their measures" (Beck, 1992, 221-223).

The rising levels of uncertainty that beset complex modern societies are reflected in the multiplicity and increasing complexity of the issues that emerge under conditions where established political agents corresponding more closely to cleavages that earlier developed around political rights and social justice are losing some of their relevance and are no longer capable of articulating the interests that attach to these new issues, which are survival or quality of life issues, sometimes

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[24]This is not to say that all forms of power are inherently harmful, for as Giddens (1990, 162-3) observes, power is inevitable and "in its broadest sense, is a means of getting things done".

[25]Ironically, collective action may also have the effect of increasing uncertainty, because it is impossible to predict what may result from it (Melucci, 1985, 790). Indeed, orthodox political actors view the tension which movements create only as a destabilizing influence, not as commentators such as Jan Pakulski (1991, 83) do, as "a constant systemic irritant, a source of conflict and innovation".

referred to as postmaterial concerns. Max Kaase (1990, 96) contends that this is "probably one of the most influential conditions for the emergence of contemporary social movements", since they more nearly reflect the reality of these "issue publics", arguing that the dominant ideologies have lost some of their "unifying force" and individuals have shifted their involvement to a more varied network of relationships.

With the enlargement in the number of issues facing society comes the problem of how "to mediate and represent a plurality of interests" for the "central problem of complex systems is the maintenance of equilibrium" (Melucci, 1988, 252, 254). Political relationships assume a new and more crucial role. Thus the politicization of previously authoritarian relationships in the family, the work-place and between government and citizen is "linked to the complexity of information systems, the need to cope with a changeable environment and the multiplying requirements of balance within the system itself" (Melucci, 1988, 252). The last requirement is linked to a shift from what Offe (1987b, 65) calls the 'old paradigm of politics', in which the central problem of democratic politics was the mediation of a variety of *interests*, whose main concerns were distributive justice claims, to a 'new paradigm of politics' in which the mediation of conflicts over *values* or cultural codes becomes the central problem overlaying interest concerns (Offe, 1987b, 65). The sphere of political action thus shifts to a new space, that of *noninstitutional* politics, in tandem with the institutions of liberal democracy and the welfare state. The values espoused by the actors in this political sphere are concerned with autonomy and identity (Offe, 1987b, 74).

In attempting to represent the multiplicity of issues in contemporary societies, radical movements have not only exposed the problem of balance in complex systems, they have also challenged the myth of linear progress. They see conventional progress as completely antithetical to the values and identities which they espouse. The survival of humankind is not to be found in economic growth and the progressive realization of some idealized social and moral order through technical-bureaucratic modernization, but in the establishment of social and political arrangements less conditional on the technical and bureaucratic apparatus of the old paradigm.

The reaction of collective movements to the destructive penetration of systemic rationalization into, what Habermas (1981) calls the "lifeworld"[26], has been

[26]Habermas defines those areas of life outside the spheres driven by the steering mechanisms of money and power, the administrative and economic spheres, as the "lifeworld".

interpreted by him as a defense of society "against instrumental rationalization that has become irrational, against over-differentiation and over-complexity" (Cohen, 1983, 109). But as Cohen points out, this is not the only function of radical movements. They also fulfill an active role in reshaping and creating democratic structures or, as Melucci (1988, 254) would have it, the conflicts generated by contemporary movements function to "prevent the system closing in on itself by obliging ruling groups to innovate, to permit changes among elites, to admit what was previously excluded from the decision-making arena and to explore the shadowy zones of invisible power and silence which a system and its dominant interests inevitably tend to create". Before I explore the creative potential of movements, I think it would be useful to look at the inadequacy of existing political structures in light of the proper functioning of complex societal systems, for the role and the promise that social movements have in democratization processes will thereby become clearer.

2.2.5: Structural Inadequacy

As noted previously, the conflicts that new social movements symbolise have shifted to concerns about values of autonomy and identity. They "no longer arise in areas of material production; they are no longer channelled through parties and organizations; and they can no longer be alleviated by compensations that conform to the system" (Habermas, 1981, 33). Western political systems based on parliamentary parties and bureaucratically-structured governmental institutions are no longer able to cope with rapid change and complexity and simultaneously maintain some level of certainty and predictability. A number of theorists, including Claus Offe, have elaborated on these inadequacies as a factor in the rise of an alternative site of politics.

The period of cultural criticism that began in the 1960s, revealing the dark side of capitalism and the side-effects of economic growth and "blind progress", met with little response from the dominant political institutions. Indeed, theorists of the time, such as Smelser (1962), interpreted social movements merely as symptoms of a breakdown in the system, which could be repaired with appropriate public policy procedures. However, as Offe (1990, 246-250) maintains, it is the "poverty of public policy" that explains the persistence of "fundamentalist" (read: radical) tendencies in contemporary social movements. The means available to governments for intervention, including regulation, surveillance, and the use of state sponsored violence, fiscal policy, and persuasion, are limited in their effectiveness in the areas

that social movements raise as issues, because the latter are areas of concern outside the economic interests of social actors.

The proliferation of value-conflicts and their agents, social movements, illustrate the inadequacy of strategies of structural reform in addressing the kinds of issues they raise. The use of these structural reform measures, characterized by Offe as 'crisis management', is dependent upon sustained growth to diffuse contradictions inherent in capitalist systems. The frustrated expectations which result from funding reductions in the areas of health and education following the sustained growth and full employment years of the postwar period have exposed the weaknesses in welfare capitalist arrangements and contributed to the crises of legitimacy which now afflict western democracies. This 'crisis of crisis management' is marked by the "fiscal crisis of the state and the decreasing ability of the mass party or [trade] union to provide social identities and integrate mass participation" (Cohen, 1982, 24). Cohen summarizes the shortcomings of structural reform thus:

> In short, the crisis of crisis management refers to the inability of welfare state type reform to compensate dysfunctional social consequences of capitalist production without (a) infringing on the capital relation; (b) transferring contradictions into the administrative system (overburdened with demands); or (c) undermining the legitimation necessary for the functional capacity of the state.

Indeed, Pakulski (1990, 62) makes the additional point that the crisis also brings into question the "very ideological *raison d'état*, the ability of the system to live up to its foundational values"[27]. The situation is one where the rigidities of the established political institutions prevent them from being able to intermediate the variability and types of issues raised by collective actors, while parliamentary institutions have lost their role as the locus of control. It is a 'legitimacy crisis' brought on by their challenge to the principle of exchange as the dominant organizational principle of capitalist societies which is the source of the radical character of contemporary movements.

Political parties have also suffered a loss of legitimacy through their inability to respond to these new conflicts centred around the burdens imposed by modernization on everyday life and identity (Brand, 1990, 32). Suzanne Berger

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[27]For a feminist critique of the inadequacies of the liberal state in responding to the fragmentation and plurality of postindustrial societies, see Balbo (1987) and Fraser (1989).

(1979, 27) has pointed the finger at Left and Right and parties generally for their failure to respond to these crises; to "the Left's failure to link its transformative vision to contemporary social conflicts and to define alternative strategies and outcomes; to the Centre-Right's failure to replace the worn-out formulas of the fat years of growth with reformist strategies for the lean years; in general to the parties' incapacity to translate new aspirations into political projects". The ideologies of the dominant political interests have therefore lost their "unifying force" and new and more varied channels of political interest have been created (Kaase, 1990, 96).

The specific structural problems that have prevented the traditional political parties from relating to the issues and value-conflicts raised by new social movements have been explored by Birgitta Nedelmann (1984). The individualistic, diffuse and long-term nature of the demands articulated by movements could not be translated into specific demands that would be attractive to particular categories of voters. Issues such as equal pay and the provision of child-care centres can be relatively easily satisfied but species depletion and conservation of biodiversity or the defense of locality or cultural diversity are not easily translated into quantifiable demands. Secondly, the traditional parties are unable to mediate the type or the intensity of the values advocated by the new movements. Since they are essentially ethical/moral issues which cannot be solved by compromise, the parties' decision-making processes which are predicated on compromise prevent them from mediating between the demands of movements and the political arena. Thirdly, the unconventional instruments of political action employed by them are discounted as illegitimate means of political action by political parties because they do not fit neatly with their own "routinized forms of political action" and because they present both threat and challenge (Nedelmann, 1984, 1043). The most significant challenge to political parties is the demand for more participation in decision-making, since direct participation is a threat to the principle of representative democracy, the basis of elite power in liberal democracies (Nedelmann, 1984, 1044).

Transformation of mass milieu parties appears a distant prospect for they would need to adopt the more flexible forms of organizational structure identified by Kaase (1990, 98) as being attractive to new social movement adherents. Additional impediments exist in the close economic alliances between the established parties and their constitutencies. The influence of trade unions on democratic socialist parties in times of economic downturn is such that it is impossible to accord a high profile to environmental concerns when the parties rely on the electoral support of trade union membership, which perceives green concerns as job-threatening (Müller-

Rommel, 1990, 210). Similar considerations apply between parties of the Right and their corporate and small business constitutencies, while governments of all persuasions are often hostage to the imperatives of transnational capital and the threat of capital flight.

The emergence of contemporary movements not only reduces the legitimacy of political parties but in organizing politically through the formation of green and peace parties they directly work to "lower the centrality of political parties in the networks of interest intermediation" by developing new modes of participation and collective decision-making (Kitschelt, 1990, 180). Green parties envision a political system in which political parties are only one of a number of decision-making bodies, that is, where there is a multiplicity of democratic structures. The *post-industrial framework party* is characterized by the devolution of party organization in contradistinction to the strongly centralized party organizations of the mass apparatus parties, whose electoral success is enabled by their ability to galvanize voters and achieve effective policy formation simultaneously (Kitschelt, 1986). The New Politics parties introduce an alternative set of values and programmes which challenge the conventional parties' policies of unrestrained growth and security through military might. They adopt radical issue positions that parties of the dominant ideologies are unable to countenance (Müller-Rommel, 1990, 230).

The developments outlined above are reflected in an increasing unpredictability in politics (Beck, 1992, 190). The last several decades have witnessed a weakening in the rigid ideological sympathies of voters and a rise in unpredictability in voting behaviour. Commentators in Australia and New Zealand, for example, have noted a considerable decline in the two-party vote over the last two decades from close to 100 percent to around 80 percent. In addition, party hierarchies in western democracies find themselves expending more and more resources in pursuit of the support of a growing proportion of swinging voters. Beck notes that in Germany the proportion had grown from 10 percent in 1963 to somewhere between 20 and 40 per cent in the 1980s. The gap, which the phenomenon of a large proportion of swinging voters represents, between the expectations of the electors and the ability of the established parties to respond to those expectations, is taken up by the parties of the New Politics and by a resurgent ultra-Right, which have been shown to be maintaining their share of votes and seats in representative democracies throughout Western Europe (Müller-Rommel, 1990, 216).

2.2.6: The Crisis of Legitimacy and the New Political Culture

I have described how more issues have become political; how the boundaries of the public and private domains have been blurred and reconstituted through the efforts of feminists and peace and environmental activists (Maier, 1987, 20-21; Pakulski, 1990, 41). The dominant political institutions have been shown to be incapable of responding adequately to the crisis of environmental degradation and other value conflicts, a situation which has engendered a distrust and cynicism in political institutions and ideologies. The kinds of policy and structural reforms available to the liberal capitalist state fall far short of the response required, while political parties likewise are unable to mediate the nature of the demands, nor the type and intensity of the values that radical social movements represent. What this situation demonstrates is that human needs and the needs of the planet are far richer and more complex than liberal democratic capitalism allows (Maier, 1987, 14). As a consequence, the legitimacy of the core institutions of parliamentary democracy is under threat (Pakulski, 1990, 40-41). The conditions for "sociopolitical blockage" (Pakulski, 1990, 53-55) are established when "normal measures" fail to handle developments which "threaten collective values and identities". Such a legitimacy crisis is likely to generate mass mobilizations.

The years since the 1960s have witnessed significant changes in the political culture and in the institutions of politics or, as Maier (1987, 2) would have it, "a change in the substance of politics interacted with a change in the instruments of politics". The traditional tasks of politics - security and distribution - have been found wanting and the institutions unresponsive to the new tasks demanded of politics that emerged after this period. The issues raised concern the *quality of life* and *human survival*, wherein politics has been called upon "to protect the environment from despoliation, [and] to create a milieu for authenticity and participation" (Maier, 1987, 9). However, as we have seen, the traditional institutions are incapable of progressing the "new agenda" and new collective movements, unfettered by established political constraints, have acted to reshape the political agenda and its institutions.

The new political culture has been characterized by Giddens (1991) as one of life politics, which he describes as a "politics of life decisions". Because personal decisions now have global ramifications, social relations are more intimately connected to the project of the self. Thus, because one's life-style choices are intimately related to the survival of the planet, life politics raises questions of an

existential/moral nature concerning how one should live one's life and "brings back to prominence precisely those ... questions repressed by the core institutions of modernity. ... Life political issues supply the central agenda for the institutionally repressed. They call for a remoralising of social life and they demand a renewed sensitivity to questions that the institutions of modernity systematically dissolve" (Giddens, 1991, 223-224). In the domain of existence and human/nature connections, the novel question of the responsibilities of humans to nature is placed on the political agenda.

To recapitulate, I have detailed how the substance of politics has changed to include questions of values which the instruments of politics are ill-equipped to address, while fewer and fewer issues can be described as non-political and hence non-controversial. As Offe (1987b, 64-65) observes, the traditional instruments - "etatism, political regulation, and the inclusion of ever more issues on the agendas of bureaucratic authorities" - cannot resolve the burgeoning number of conflicts facing advanced industrial societies. In this context, Beck (1992) discerns an *unbinding of politics*, in which the concept of a central focus to politics is being challenged by the formation of citizens' action groups and social movements outside the umbrella of orthodox institutions (Beck, 1992, 190). He also sees a second, simultaneously occurring trend wherein "the potential for structuring society migrates from the political system into the sub-political system of scientific, technological and economic modernization" (Beck, 1992, 186). The political is transferred to the sphere of the non-political. However the changes are more complex than a simple migration of power. At the same time, the side-effects engendered by the systems of techno-science and economics become the subject of discourse and require legitimation before a public increasingly critical of the risks to public wellbeing. The role of justifying the socially-transforming decisions taken in techno-science and business falls to the politicians, who have no part in those decisions, yet must assume responsibility for them. And still the fixation with the political system as the centre of politics persists, even though the decisions which transform society have moved to the sphere of sub-politics[28] (Beck, 1992, 186). Beck (1992, 193) further argues that this process of disempowering and unbinding of politics ensues from the process of democratization, when "rights are protected, social burdens redistributed, consultation made possible, wherever citizens become active". Politics becomes generalized and decentralized with the possibility for a multiplicity of democratically

[28]Beck designates that arena of socially transformative decision-making which is separate from the formal political sphere as the sphere of "sub-politics". It includes the technical/scientific and business spheres.

organized structures. These clusters of democratic activity may be organized around "issues, categories, persons, or basic dynamics of the larger society" (Calhoun, 1992a, 38).

What would such a conception imply for the traditional instruments of politics? The perception of politics as the central locus where decisions are made is yet to catch up with the reality, for as Beck (1992, 233-234) argues, modernity has opened up a "scope of action" of far greater breadth than the orthodox understanding permits. It is already being taken up and used by various groups in society. If, as I suggested above, the fiction of a centralized politics and political institutions is discarded, the reality that socially and environmentally transforming decisions are being made in board-rooms and the research establishments of techno-science without democratic legitimation (such as those by genetic engineers on the future of the human species and by major logging companies on the utilization of native forests) can proceed more clearly into view.

Hand in hand with the generalization of politics, political relationships themselves have acquired renewed importance in the functioning of complex modern societies. Melucci (1988, 251-252) contends that "never before has it been so necessary to regulate complexity by means of decisions, choices and 'policies', the frequency and diffusion of which must be ensured if the uncertainty of systems subject to exceptionally rapid change is to be reduced". He attributes this process of 'politicization' to the complexity of information systems, to rapid change in society's systems and to an increasing need to maintain balance within the system itself.

The dilemma that arises with the migration of decision-making to the area of sub-politics is how to allow freedom of enquiry and appropriate knowledge acquisition without the restrictive effects of bureaucratic regulation and centralized decision-making. Beck's answer is to encourage and institutionally protect *self-criticism* within organizations as an essential ingredient in a system of self-control. The preconditions for self-control consist of the establishment of alternative evaluations, practices, discussions about the consequences of technical and scientific practice, and avenues for expression of repressed scepticism. Techno-science does not have all the answers and it certainly cannot ask the appropriate questions of its own practice, when it acts as if it has a monopoly on truth and knowledge. A strong and independent judiciary and media are seen as crucial underpinnings for a system of sub-political control (Beck, 1992, 234).

Although the last several decades have witnessed increasing politicization of the non-political sphere (that is, in the multiplication of autonomous decision-making centres at one level and at another the reappropriation of everyday life matters by collective movements), as yet "we are still acting out the play according to the script of industrial society" (Beck, 1992, 233). There has not been any widespread penetration of democracy into the spheres of everyday life, although the monopoly of politics on policy is collapsing. The "democratization of everyday life" is occurring at that level of the non-political where society, through the actions and demands of contemporary movements, is encouraged to "assume responsibility for its own issues, demands and conflicts [subjecting] them openly to negotiation and to decisions and transform[ing] them into possibilities of change" (Melucci, 1988, 259). This is not to say that the traditional political instruments and the organizations of business and science lack effective means of blunting the demands of radical groups who challenge the formers' decision-making and practices (Crowley, 1994). Indeed, there has been a concerted rear-guard response from business and related interests (Beder, 1997).

It is not clear whether contemporary movements foreshadow the forms of sociopolitical organization of the future. Giddens (1991, 228) is sceptical, although he does concede that life politics might stimulate "the development of forms of social order on the other side of modernity itself" and these would probably be different from those that predominate now (Giddens, 1991, 214). Melucci (1988, 1989) on the other hand does perceive indications for future political forms in the contradictions between contemporary movements and the established system. The zones of contact between political institutions and collective demands are envisaged as developing public spaces, whose main function is to highlight the concerns raised by the movements and thus to enable complex societies to acknowledge and address the 'quality of life' issues confronting them, precisely because in such societies "no one appears to be responsible for the goals of social life" (Melucci, 1989, 79). These *public spheres of representation* should operate in areas that are oriented towards expressing the demands and contradictions of society, such as the knowledge-producing institutions and the communications media, as well as the area of collective consumption - health, transport, housing, and community services. Melucci (1989, 79) envisages that they

> would provide social actors with the opportunity to appear and to make themselves heard, without losing their particular character or autonomy. Through these channels, the questions raised by collective action could become the subject of policy-making

> negotiations, thereby having effects on the social system as a whole, without institutionalizing the actors of movements.

This may only be the case where social movements are accorded an authentic social role, but where they are perceived to be no more than ephemeral irritants by the dominant interests, there is little likelihood of such an innovation. Most potential for social transformation exists in those spheres of public life less directly impinged upon by the imperatives of state and transnational capital, namely at the local government level (Dryzek, 1995).

Yet Melucci thinks that there is good reason to view contemporary movements, not as a failure of politics, but as essential actors in the process of social and political life of complex societies. They contribute to the reform of society by obliging dominant groups to innovate; they compel changes among elites; and they press for the admission of previously excluded issues to decision-making agendas, while also exposing relations of power, often obscured behind the objective constraints of techno-scientific decision-making (Melucci, 1989, 79).

It is possible to envisage a plurality of independent public spaces whose principal function is to encourage responsible decision-making among all actors in society. The effect of accepting responsibility for the side-effects produced by their actions would be to reduce the uncertainty and perhaps ameliorate the complexity of modern life, for as Beck (1992, 227) observes, denial of risks can have the opposite of what is usually intended, instead causing general destabilization.

2.2.7: The Critical Public Reconceived

The crises of the late twentieth century have rekindled interest in the concept of the critical public sphere and the role of social movements as critical elements in the functioning of complex modern societies. However, systemic legitimacy crisis and the failure of democratic institutions to generate common purpose necessitates a rethink of liberal democracy's discursive spheres. To recapitulate, in the eighteenth century, the bourgeois public sphere operated as an area of debate and opinion formation between the realm of public authority (the state) and the private domain of civil society (which included private economic relations and the sphere of intimate familial relations). Through the nineteenth and twentieth centuries the public sphere degenerated into a stage for public acclamation of special interest group actors and politicians, while the public was effectively excluded from public debate and

decision-making, essentially as a result of the coupling of the state and the public sphere. In the late twentieth century the nature and the function of the area of critical debate is undergoing further transformation, for the depoliticization and 'unbinding' of politics necessitates a reconception of the critical public sphere. Melucci, Giddens and Beck are of the opinion that the complexities and contradictions of modernizing systems of advanced industrial society furnish the conditions for the repoliticization of many spheres of existence and the reintroduction of questions of a moral/existential nature.

A reconceived arena of critical debate would differ in both form and function to the early liberal public sphere. The idea of one public sphere would be replaced with a network of overlapping critical publics operating at different levels of society, perhaps as envisaged by Calhoun (1992b, 37), as a "field of discursive connections [consisting] of clusters of relatively greater density of communication within the looser overall field". These new areas of representation should mediate the spaces between the market, the state, parliamentary institutions, techno-science and business organizations, and spheres of social existence. In turn the formation of self-critical publics within the spheres of sub-politics may be stimulated and professional groups in these areas brought closer to the socially and environmentally transforming effects of their interventions, thus shifting responsibility for legitimation from the formal political institutions.

Critical debate for the formation of public opinion would not be the preeminent *raison d'être* of these spheres, although it would remain an important function, but rather *self-criticism*, both at the level of sub-politics and in wider society at the points of contact between the demands of everyday life and the established institutions of government and bureaucracy. A strong and independent media would be crucial to the effective functioning of the principle of self-criticism and to allow the assumption of responsibility through the exposure of risks. An effective media should be "neither wholly controlled by the state nor concentrated in the hands of large-scale commercial organizations" (Thompson, 1990, 119). The potential of media barons to control important societal processes such as the outcome of elections is inimical to the proper functioning of a democratic society. Similarly, the right to criticism must be protected. In this respect, "whistleblower" legislation is essential and a new culture that rewards rather than despises whistleblowers is a necessary development. Scientists, engineers, bureaucrats and other professionals would then be able to report on the risks and side-effects that they see in their own and others' work with impunity:

> The right to criticism within professions and organizations, like the right to strike, ought to be fought for and protected in the public interest. This institutionalization of self-criticism is so important because in many areas neither the risks nor the alternative methods to avoid them can be recognized without the proper technical know-how (Beck, 1992, 234).

Presently neither science nor business takes full responsibility for the side-effects of their decision-making and their interventions. Instead, politics shoulders the responsibility for practices and decisions over which it has no control and as long as this remains the case the generation of side-effects will continue (Beck, 1992, 227).

Legitimation for these socially transforming actions, which are not subject to democratic scrutiny, is provided by faith in the doctrine of 'progress'. It is 'progress' which allows science the privileged position of non-responsibility for the social and environmental changes which it engenders, thereby subverting the fundamental demands of democracy (Beck, 1992, 214). The problems of social and environmental change come as an afterthought, trailing full employment, the primacy of the market, international competitiveness and so on. There is always faith that, whatever the risks of a proposed intervention, there will be a technological solution available to ameliorate the side-effects. But too many side-effects means too many risks and therefore too much insecurity and uncertainty. The possibility of an authoritarian politics emanating from calls for 'strong political leadership' when voters lose faith and become apathetic and cynical about the ability of political institutions to address the insecurities that beset them is not to be ignored. As Beck (1992, 228) warns: "The hunger for order and reliability would revive the spectres of the past. The side-effects of a politics that ignores side-effects would threaten to destroy politics itself". To avoid the disaster of an authoritarian solution to the uncertainties and risks that surround us, a revised and revitalized institutional framework such as that proposed above is a necessary precondition.

I have outlined the case for a different model of socio-political organization; one that recognizes trends towards a generalization of democracy and the reality of a decentralized politics; that has, as its constitutive elements, spheres of discursive deliberation aimed at clarifying the general interest; and that is directed towards encouraging all actors, collective and individual, to assume responsibility for the consequences of their own decisions and practices in the light of the discursively decided common good. The role of a strong and independent media as a vehicle for

the reinforcement of the principle of self-criticism in this new model of associational life is viewed as crucial. Self-criticism should be encouraged and institutionally protected for, as Beck (1992, 234) observes:

> Enabling self-criticism in all its forms is not some sort of danger, but probably the only way that the mistakes that would sooner or later destroy our world can be detected in advance.

2.3: Contemporary Collective Criticism

I have situated contemporary collective action against a background of increasing societal differentiation, complexity and contradiction, of growing uncertainty and rising insecurity resulting from exposure to the risks and side-effects generated by industrial society's seeming inability to take responsibility for its contribution to the degradation and devastation of the biosphere. The current round of collective action has been interpreted as a renewed wave of cultural criticism in response to the negative side-effects - reflected in ecological, economic and social crises - resulting from the period of rapid industrial and technological change that has followed World War 2. The crises that beset western societies have been demonstrated as not amenable to the existing reform measures available to liberal capitalist political institutions. Neither can public policy solutions diffuse the crisis of legitimacy facing the dominant political interests, nor can the established instruments of interest intermediation adequately represent the number and types of issues and value conflicts that the proliferation of interest groups, voluntary associations and new social movements represent.

In the political sphere, the crises facing western societies and the inability of the systems of governance to respond adequately to them results in a high degree of elector apathy, cynicism and unpredictability, reflected in the breakdown of voter loyalty to the established parties and a movement towards parties which more nearly represent the values of the postwar generations, the parties of the New Politics (Dalton, Flanagan, and Beck, 1984b, Ch. 15). This new political cleavage cuts across preceding issue cleavages - democratic rights and social justice - and introduces valence issues to the forefront of the political agenda (Inglehart, 1984; Papadakis, 1988; Poguntke, 1993). The "social roots" of the old milieu parties have become blurred and politics is no longer the politics of class but of values (Inglehart, 1984; Scott, 1990, 29; Veen, 1989, 32). More specifically, the new cleavage is a conflict about *interpretations* of values; between the dominant core values of materialism and

an alternative set of postmaterial values[29]. Linked to this fundamental value clash is disagreement about whether market forces should override public interest and whether political structures should be expert-directed or should operate with the active participation of citizens. There is debate over whether society should be centralized or decentralized; and also over the use of knowledge, between infinite faith in science and technology and a perception that there are social limits to science (Papadakis, 1988, 442). Above all it is the conflict over nature, whether resources are ample or limited together with the ecological contradictions that are manifesting, that is the catalyst for the mobilization of the wave of green movements against the negative side-effects of industrial modernity (Eder, 1990a, 21).

A number of long-term changes in socioeconomic spheres have been recognized as factors contributing to the emergence of the new politics orientation (Poguntke, 1993, Ch. 3). These include an increase in the level of affluence that accompanied the period of postwar economic growth; the restructuring of the labour force from its predominantly industrial base to the tertiary or service sector; and expansion in the urbanized population with its concomitant weakening of traditional social networks and institutional/party loyalties (Dalton, Beck, and Flanagan, 1984a, 5-7). Parallel with these changes came expanding educational opportunities resulting in higher levels of cognitive mobilization and hence in increasingly sophisticated electorates (Dalton et al., 1984a, 470; Inglehart, 1990, 44).

Improvements in education have been accompanied by better information-handling skills and, with that development, an explosion of information resources, which has resulted in the increasing democratization of access to a rapidly expanding body of complex and sophisticated knowledge, particularly for the middle classes with most access to the educational facilities that are necessary for participation in the information society. These developments in political sophistication and the dissemination of information signal changes in the class structure of western societies, and particularly the role of the new middle class, as identified by Offe (1985). It is this particular section of industrial society that is most clearly aligned with the postmaterial values that have spawned the new politics parties of the last two decades. Moreover, it is these two factors that have facilitated the emergence of the most recent collective movements, movements which challenge the core

[29]It should be noted that these criteria fit not only the progressive new politics groups referred to here but also social movements of the populist right. The single characteristic which differentiates progressive social movements from the latter is their commitment to democratic politics. Groups belonging to the right are more usually concerned with issues of power and control - eg. law and order is usually a high priority - and therefore they are susceptible to autocratic forms of organization.

assumptions of industrial modernity. With the expansion in information resources and technology, new ideas can be widely and rapidly disseminated to a larger proportion of the population. The process of public opinion formation, once largely the province of elite groups, is thus open to other actors with the required capacity to access information resources and technology. This development has wrought considerable change in the level of public influence on decision-making processes (Dalton et al., 1984a, 7; Papadakis, 1989, 78). It constitutes a significant factor in the emergence and persistence of new social movements and their associated political arms. In addition, partly as a consequence of higher levels of cognitive mobilization, disenchantment with the restricted role of citizens in the elite-directed, representative model of democracy has precipitated a "participatory revolution", which in turn has opened up new channels of political influence (Kaase, 1984). Contemporary collective movements represent one such alternative to the traditional avenues of interest intermediation and political influence.

2.3.1: The Challenge to Modernist Ideology

Modern societies have experienced a century of conflicting and contradictory social progress and gradual democratization through the application of reason, as well as the irrationality of total war, fascism, genocide and repression. Alexander (1990, 26) refers to this tendency of modern life as the "nightmare of reason", and, as he soberly concludes, "even when the darkest shadows of antimodernity have been avoided, the twentieth century has been haunted by a sense of disappointment with modern life". The emergence of new forms of collective action in the latter half of this century, as I have argued, is a response to this disillusionment and to the side-effects of a modernity driven by an instrumental rationality that treats nature as other, as another factor or force of production. New social movements, as representatives of the most recent wave of cultural criticism, challenge industrial society on both ideological and systemic levels. At the level of ideology they dispute the core, normative assumptions of modernity, while at the systemic level they query the structures and organizational styles of the various spheres of society - social, political and economic.

The new social movements are not only a response to modernization processes; they are indeed active participants in their own creation. Paradoxically it is the conditions of "stability, prosperity and consensus" engendered by the postwar bureaucratic capitalist welfare state that have provided them with the instruments (that is, education and cognitive development) for their ideological and systemic

critique of the goals of modernity (Crook et al., 1992). I contend that they are the progenitors of that alternative modernity prefigured in the writings of Montaigne. In the following sections I discuss the core assumptions of the dominant modernization processes; I consider what is problematic about those assumptions for the future of the planet; and I also elucidate the conception of modernity that ecological movements might articulate. I also attempt to identify the challenge that new social movements, particularly green or ecological movements represent and, most significantly, their creative, transformative capacity.

The core assumptions of the modern age are predicated on a specific symbolic code which societies since the age of Enlightenment have conceived as the foundation for a modern society. The body of thought underlying the modern era is founded on two concepts:

- that society should be distanced from all earlier premodern cultural traditions and
- that society should be constituted independently of the vagaries of nature (Eder, 1990a, 26).

The urgent necessity of erecting a radically different society meant that modern societies were constituted in the breach (Moscovici, 1990, 8). Society is thus conceived in the negative - negative to *cultural tradition* and negative to *nature*. This is the theme that underlies all modern rationalist thinking and action systems and gives rise to a "general anthropomorphism" in which "the model of human action and interaction is the standard of comparison for the interaction between men and nature" (Eder, 1990a, 27).

The key issues of modernity centre on the notion of progress and its realization through the application of science and technology. The project of the mastery of nature which would liberate society from the limitations of nature and hence lead to its moral progress has come under increasing pressure. As Berman (1981, 189) observes however, this project is only a "partial response in the human being". Underlying this particular conception of modernization is a model of rationality that ironically excludes moral considerations from humanity's connections with nature. With nature as object, the relationship to nature can only be an instrumental one. It is a one-way relationship that results in the increasing subjugation of nature to the criterion of greater and greater efficiency in its use. Eder (1990b) argues that there is an alternative tradition of rationality that derives from a

different cultural tradition in western societies' relations with nature. Its origins are to be found in the Jewish code of "ritual purity", which "implied a harmonious or peaceful relation to nature, where nature is defined in such a way that limits its use by human beings" (Eder, 1990b, 73). This tradition has been largely latent in modernity, periodically surfacing with various Romanticist movements and more recently with movements concerned with animal rights and vegetarianism. However, its most significant expression, Eder (1990b, 73) contends, is the emergence of the ecological movement, which is both a social and cultural movement. Thus "as a social movement it continues the conception of 'material' rationality of the old movements, the working class movements and the bourgeois movements", in that equal rights and social justice remain significant notions, but "as a cultural movement it goes beyond this rationality and pleads for a rationality that puts into question not only the social relations of production, domination and consumption, but also the symbolic forms serving as the medium of these social relations" (Eder, 1990b, 73-74)[30]. The utilitarian version of practical reason excludes a moral connection with nature. In modern societies, it is insufficiently counterbalanced by a form of practical reason largely restricted to modern family life and only partially actualized into the political sphere as human rights, that is, communicative reason. Communicative reason is "based on the rationality of equality and discursive argumentation", while encompassing a moral approach to nature and recognizing limits to the human use of nature (Eder, 1990b, 75).

Given the negative social and environmental consequences so far manifested from sole reliance on the instrumental mode of rationality, Eder argues, firstly, for a version of rationality and progress based on a fusion of the two traditions that integrates the strategic/utilitarian with the communicative, and secondly, for a different interpretation of moral progress which is not exclusively related to technological progress. Ecological movements are the principal vehicles for dissociating the idea of moral progress from technological progress by identifying the irrationality and self-destructiveness of the technological subjugation of nature. In the process they furnish alternative rationalities, an alternative model of moral progress, and an alternative social construction of nature.

The ecological crisis has served to thematize and problematize the society/nature relationship. Ecological movements are engaged in the process of redefining this connection and, in so doing, they are developing a competing model

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[30]Eder (1992, 336ff.) further develops the idea of an alternative rationality using Weber's "material" rationalization as distinct from the "formal" rationality of the dominant code of modernity.

of modernity. They have a vision of society that "to be sure secures individual rights and material wellbeing but within nature, not beyond it and in harmony with nature, not in spite of it" (Eder, 1990a, 39). Further, the problem of reproducing society in nature, which, under the approach of technological progress, was a problem of "controlling the political and economic reproduction of modern social systems", has become the problem of "ecological reproduction" (Eder, 1990a, 42). The problem of nature is not only a technical one; it is an ethical problem that demands a reconception of the moral basis of modernity, in order to reconceive "another modernity, a society that is able to question not only its social relations of production and the institutions endorsing them but also its relations with nature" (Eder, 1990a, 43). Ecology movements, in seeking to redefine the culture/nature boundary, strive to direct society's attention to the fragility of its relationship with nature and to modify how society sees itself in relation to nature.

Collectively, ecological theorists and activists articulate a vision which challenges the prevailing anthropocentric, patriarchal and hierarchical relations, assumptions and world-views and endeavours to replace them with an ecocentric culture, which Eckersley (1992a, 188) contends is "crucial to achieving a lasting solution to the ecological crisis [since] it is only in those political communities in which an ecocentric sensibility is widely shared that there will be a general consensus in favour of the kinds of far-reaching, substantive reforms that will protect biological diversity and life-support systems". The 'interconnected web of relations' view of the world espoused by ecocentrists challenges anthropocentrism by redefining what is morally relevant (Eckersley, 1992a, 49). The belief that moral value can only reside in human nature, that the rest of nature has little or no moral value other than an instrumental one, is not tenable in an ecocentric culture. Such insights ground the actions of green movement activists and supporters in their networks of everyday life and in their reformist attempts to remoralize social and political life by reinstituting the notion of the common good on the political agenda and by persuading society to take responsibility for the side-effects of its actions and for the ecological health of other cultures, other species and ecosystems.

2.3.2: The Challenge to Modernist Institutions: The New Politics

It is the dual character of new social movements, that is, their defensive and offensive dispositions, which underlies the challenge that they represent to existing sociopolitical and cultural codes. This duality has been linked to the system/lifeworld distinction by Cohen and Arato (1992, 524), who find in

Habermas's formulation of an incomplete modernity a basis for understanding why contemporary movements seek to operate in the political and economic spheres (the system). In their view, previous theories of collective action inadequately explain why some movements are constrained to act in both the system and the lifeworld. By developing elements of resource mobilization theory and the 'identity-oriented paradigm', they propose instead a dual logic of collective action. Thus the defensive aspect of movements is not restricted to defense of the lifeworld against the expansion of "steering mechanisms", but also involves the development of "the communicative infrastructure". Habermas's insight that movements are "the carriers of the potentials of cultural modernity" is indispensable to an understanding of movement attempts to redefine identities and norms, and to democratize associational structures in the lifeworld (Habermas, 1987). His thesis of the "selective institutionalization" of the potentials of modernity in the various spheres of existence furnishes the basis for an understanding of the 'offensive' orientation of contemporary movements and why they target political and economic spheres, "the realms of 'mediation' between civil society and the subsystems of the administrative state and economy" (Cohen and Arato, 1992, 531-531).

According to Habermas, modernization of the various spheres of society has been achieved through different processes. Thus strategic instrumental rationality is the principal modernizing agent in the subsystems of state and economy, while cultural modernization has enabled increased opportunities for self-reflection and for "decentred subjectivity", accompanied by the development of democratic communicatively organized institutions in the lifeworld.

> Societal rationalization has been dominated, however, by the imperatives of the subsystems; that is, the requirements of capitalist growth and administrative steering have predominated over lifeworld concerns. The "selective institutionalization" of the potentials of modernity has thus produced overcomplexity and new forms of power on the system side and the impoverishment and underdevelopment of the institutional promise of the lifeworld. The "colonization of the lifeworld" related to capitalist development and to technocratic projects of administrative elites has blocked and continues to block these potentials (Cohen and Arato, 1992, 525).

The combination of the potential for increased self-reflection about all spheres of action resulting from cultural modernization and the "selective institutionalization" of the potentials of modernity (self-reflection, autonomy,

freedom, equality, and meaning) therefore gives us the *how* of new social of movements (Cohen and Arato, 1992, 524). It explains how they are able to perceive differentials in the fulfillment of the promise of modernity and *why* they press their demands for the democratization of both spheres of existence through the political and economic spheres.

It is this dual logic of social movements that similarly facilitates an explanation of their double-headed organizational logic, why they combine radical goals with reformist and pragmatic political practice. The formation of radical Green parties in the traditional political sphere is illustrative of the need that ecology movements have to exert pressure on the political and economic spheres in their pursuit of the interests of the lifeworld (where the lifeworld is interpreted to refer not only to civil society but to also include the life support systems of the biophysical world). By exerting influence on these spheres through public opinion formation and therefore stimulating the diffusion of communicatively-organized democratic structures, which are created through consensus and the ongoing questioning of norms, movements, in their political guise, engage in a form of "self-limiting radicalism", which accepts with some ambivalence the reality of parliamentary democracy and the market economy even as they attempt to reform these institutions (Papadakis, 1988, 436). In their struggle to ensure the penetration of democratizing influences into and over the political and economic spheres, that is, to reinstate civil society's control over the institutions of social life, they act to modify the pattern of linkages between the different spheres of society (Cohen and Arato, 1992, 509, 520).

What is radical about the new politics of green movements is that it articulates a new set of political goals. Where old politics was essentially preoccupied with progress through economic growth predicated on consensus and a stable economy, the new politics requires that economic decision-making be guided by ecological imperatives and is concerned with a far wider range of issues and values, including individual autonomy, rights of participation, peace issues and environmental rights. Most of these goals "apart from the ecological issue and the strong concern with individual self-determination and self-realization ... are not recent inventions. It is the specific combination of goals ... as well as their radicalism and the higher salience attributed to them which makes the new politics a tendency in its own right" (Poguntke, 1993, 10).

The advent of environmental politics in the sphere of conventional politics has had the effect of introducing elements of fluidity and diversity into party politics

(Dalton, 1994, 240), a tendency which has occasioned a shift away from the established parties to a citizen-based politics and which represents a challenge to the dominance of parties in the systems of interest intermediation. The emergence of green political parties has also impacted on conventional parties *per se*, acting as a source of reinvigoration for their strategies, ideologies and programmes (Papadakis, 1989, 77). In attempting to break with the consensual politics which has typified the postwar period, green parties have exposed both the ideological weaknesses of traditional parties and their programmatic shortcomings, namely the dearth of coherency in party policies resulting from their 'catchall' disposition (Papadakis, 1989, 64-65). Thus in challenging the orthodox view of economic progress, the greens confront conventional political parties with inconsistencies between ideology and policy and thereby constrain them "to broaden their own understanding: to make more specific links between ideology and policy statements, to incorporate concern about the environment, democratic rights and technological developments into their economic programmes" (Papadakis, 1989, 64).

The action style of the new politics, described as unconventional, involves the use of direct action techniques which may range from the signing of petitions to raising protest banners to blockades and occupations. Such protest techniques are aimed at "*challenging* the *elites* in order to assume *direct* influence over *specific* political decisions" (Poguntke, 1993, 10). The "politics of influence", so called by Cohen and Arato (1992, 526), targets the sphere of political discourse in order to open up the institutions of the political realm to the valence issues articulated by the new social movements. This critique of "democratic elitism" is distinguished from conventional *elite-directed* participation which characterizes contemporary forms of representative democracy, where electors choose between competing policy packages presented to them by party elites. The politics of the new paradigm is therefore self-limiting in that it is not a revolutionary politics, for it does not aim to overthrow existing political, economic or social institutions as earlier movements did, but seeks to operate within existing societal structures of parliamentary democracy and market, while simultaneously aspiring to reorganize and reform them in a "progressive transcendence of modernity rather than its outright rejection" (Eyerman, 1992, 46).

2.3.3: Green Movements and Sustainability

The fundamental problem facing the world's societies is the sustainability of the planet's life support systems and how to cope with the crises engendered by industrial development and economic growth. The essence of the green critique is

that existing social choice mechanisms are, to a large degree, ecologically irrational and therefore impede sustainability. In the context of sociopolitical transformation, we should endeavour to assess the transformative capacity of green movements, whether they contribute to ecological sustainability and whether green innovations and transformative impacts on human systems furnish the latter with the capacity to respond to ecological crises. Dryzek has devised a number of criteria for evaluating the ecological rationality of social choice mechanisms - negative feedback, coordination, robustness, flexibility and resilience - which I use to gauge the answers to these questions, firstly applying the criteria to green movements *per se* and then to their role as transformative agents.

In assessing the role of the green movement, it is possible to argue that as a critical public sphere, it performs the function of a *negative feedback* mechanism. Berman (1981, 243) has identified the importance of negative or self-corrective feedback in both human and natural systems, which can exhibit one of three types of behaviour: "self-correction (also called steady-state), oscillation, or runaway". Thus "in a self-corrective system, the results of past actions are fed back into the system, and this new bit of information travels around the circuit, enabling the system to maintain something near its ideal, or optimal state. A runaway system, on the other hand, becomes increasingly distorted over time, because the feedback is positive, rather than negative or self-corrective". The problem facing human systems is that some spheres, predominantly economics, science and technology and, latterly, politics, are in runaway mode, a characteristic of which is maximizing behaviour; that is, the maximizing of one or more variables. In the case of western societies, it is "purposive rationality" in the guise of efficiency. Maximizing rationality has resulted in a self-destructive neglect of the homeostasis of the planet as a whole and this has manifested in various forms of environmental, social, economic and political crisis (Dryzek, 1987, Ch.2). As symptoms of extreme ecological disequilibrium, ecology/green movements perform a critical feedback function in a number of ways.

Firstly, in the process of problematizing and seeking to redefine the society/nature relationship, these movements have alerted public opinion to the connection between biophysical systems and political systems or, to phrase it differently, their role has been to interpret the political implications of ecological relationships (Princen, Finger, and Manno, 1994). They have also been responsible for making the connection between activity at the local level and the manifestations of ecological crisis on the global level, such as greenhouse gas accumulations and ozone depletion, and they have drawn attention to the risks of continuing the economic

growth model not only for human health and wellbeing but also for the survival of the planet as we know it (Beck, 1992, 227).

Secondly, in querying the sustainability of continued economic growth and industrial development, they effectively challenge the primacy of the nation-state and its interdependence with liberal representative forms of democracy. They question the capacity of the dominant forms of political organization given their inherent interlocking relationship with the forces of economic production to deal with global ecological problems and world economic and political forces beyond their control (Carter, 1993; Princen et al., 1994, 224).

Thirdly, in response to their critique of modernist forms of political and social organization, they have attempted to develop through experimentation alternative organizational forms and less harmful ways of relating to the natural world and in the process have contributed to societal transformation, particularly their experiments with direct and participatory democracy. Expanding the arena of participation can only improve the quality of critical debate and hence influence over policy decisions, although as Dryzek (1987, 120ff.) points out, to provide effective self-correction, debate must be elevated to the level of the common good, otherwise it will remain at the level of self-interest and will not generate the kind of feedback on the condition of human-nature systems that is required.

Fourthly, it is green movements which are responsible for articulating the general interest at a time and under a culture which encourages rampant self-interest. Their emphasis on the common good obliges other social actors to accept responsibility for environmentally-damaging activities. They alert public opinion, for example, to the connection between the health of workers and the polluting effects of the industries in which they are employed and between the health of marine ecosystems and the nutrients and toxins washed from agricultural land into river systems. This sort of exposure obliges economic and political actors to shoulder their responsibilities for the proper provision of environmentally safe workplaces and the sustainability of natural systems.

Lastly, as previously described, adherents of green movements are most likely to espouse postmaterial values and to originate in the new middle class, which is precisely the societal group exhibiting high levels of cognitive mobilization, including high education attainment, articulation capacity and access to information technology.

Undoubtedly the generation and provision of high quality information and data is a critical factor in the green movement's capacity as an effective feedback mechanism.

Because the interface between human and natural systems has become so complex and its outcomes unpredictable, there is a need for constant high-quality "deviation-counteracting" input into processes of collective choice, so that appropriate responses can be made, that is, in minimizing the "shortfalls in the life-support capacities of ecosystems in combination with human systems" (Dryzek, 1987, 47). Green movements and their political manifestations have taken up this role in late modern societies, but as yet, for the entrenched systems of money and power, their existence is still viewed largely as nuisance value to be bought off with the odd concession such as a national park or recycling programme. The critical importance of institutionalizing spheres of self-criticism throughout all the arenas of human activity under conditions of severe disequilibrium between human and natural systems is yet to be appreciated.

The transnational linkages between nationally-based green movements and globally-oriented green non-government organizations, (such as Greenpeace, Friends of the Earth, and the Worldwide Fund for Nature) has the potential to encourage the kind of *coordination* required on a global scale by the transboundary nature of the disruption to ecological processes (Princen et al., 1994, 218). It has become obvious that traditional nation-states and traditional politics are not equipped to deal with the transboundary properties of ecological problems (Dryzek, 1987, 28-33; Fuentes and Gunder Frank, 1993, 155-157; Princen et al., 1994, 218-220). Traditional state-centred politics is essentially about domestic mediation of conflicting interests, and diplomatic compromise between competing states resting on the foundations of economic growth and national security (Princen et al., 1994, 219). But the politics of environmental crisis must necessarily be a different one, since the biophysical characteristics of global ecological problems - complexity, non-reducibility, variability, uncertainty, collectivity and spontaneity (Dryzek, 1987, 28-33) - mean that compromise solutions within and between states are likely to be inappropriate and inadequate. Thus:

> When resources are near exhaustion and waste sinks near capacity, when environmental effects are unpredictable and irreversible, when further economic growth contributes more to the problem than to the solution, there are no compromise solutions in the traditional sense of politics. Where a compromise solution is inadequate and long-term effects are unavoidable, the politics of

> global environmental crisis is necessarily a politics that connects biophysical conditions and engages a wide range of actors. It is a politics that defies traditional compromise solutions among states and their industrial partners. And it is a politics that pits state industrial interests against community and ecosystem interests (Princen et al., 1994, 220).

While social movement activity at the state level is oriented to the indigenous political system, environmental activism at the global level transcends this limited sphere. Global environmental organizations and networks of green activists furnish a basis for the communities of collective action required to address these crises. In the process of devising, inventing and creating innovative, less harmful modes of existence, not grounded on continuous quantitative growth, and in making the critical connections among the characteristics of ecological problems, they transcend traditional concerns of territorial claims and highlight both the political nature of biophysical limits and the link between the local and the global. They provide the critical linkages that translate local knowledge of ecosystem demands to the transnational level.

As the imperatives of environmental organizations are not those of nation-states, which are, rather, industrial development and maintenance of the integrity of the state (Carter, 1993), organizations can in fact bypass states; they do not have to compromise on either ethical or ecological principles; they do not have an electoral constituency to please; and they can prod and push states regardless. Their role at the transnational level is to create the conditions that regulate the behaviour of states and which the states would not otherwise create themselves, as in the establishment of a regime to counter the trade in endangered species or in pushing governments to implement sustainable development commitments (Princen et al., 1994, 225). At the local level of movement politics they can act as monitors and enforcers of international agreements to procure desirable environmental outcomes, as in the proper management of World Heritage-designated wilderness. Thus in connecting local activity with its global implications, in politicizing the biophysical at both state and international levels, and in highlighting the transboundary nature of these linkages, globally-oriented green movements provide the basis of coordination not possible under a system of nation-states.

The crucial importance of *flexibility* in both human and natural systems for their continued survival is well recognized and involves the capacity of an organism or system to adapt to changing environmental conditions (Berman, 1981, 262-264;

Dryzek, 1987, 51-52). The history of human systems and their interaction with natural systems, particularly since the seventeenth century, has been one of increasing homogeneity and thus rigidity, resulting in monocultures in both thought and practice - political systems, agriculture, urban systems, art and so on. Green movements and parties introduce a degree of flexibility into these rigidities in that they present alternative ways of thinking and acting. As Berman (1981, 263) observes: "Flexibility in ... world views provides ... possibilities for change, evolution, and real survival". Flexibility is necessary for homeostasis in ecosystems and involves the need for constant adaptational change (not the progressive change characteristic of complex modernizing systems).

The flexibility that the environmental movement introduces into existing political systems has been identified by Russell Dalton (1994, 243-249) as arising from their intrinsic diversity which manifests as a plethora of organizational forms, of organizational structures, of political activity, and in ideological variety. Although some commentators see this diversity as fragmenting and therefore a source of weakness, Dalton, to the contrary, maintains that it generates strength. Because the environmental movement consists of a diverse range of groups, it can therefore mobilize "a wider array of supporters than would be possible with but a single organizational point of view" (Dalton, 1994, 247), while the diversity of orientation to social change means that different groups can be drawn on for different facets of involvement, from direct to indirect action. Moreover, its diverse foci connote a wider social base than a unified environmental movement might support, while the diversity of appeal and style of the movement's constituent groups also signifies a broader political network and therefore greater opportunities for political alliances. The flexibility derived from diversity also gives the movement a greater range of political tactics, and, because different groups have different foci and objectives, it allows the movement to experiment, "to identify the areas of political change that are likely to reap the greatest rewards (for the movement and for humankind)" (Dalton, 1994, 248). The effect of the environmental movement is to generate societal innovation through experiments with alternative practices and tactics, thus acting as agents of social environmental learning:

> In sum, by ... setting examples with concrete activities, environmental (movements) engage in creative and innovative learning processes whose results come to affect society as a whole. ...[T]hey act as agents of social learning by linking the biophysical conditions with political concerns while simultaneously acting locally and globally. They frame the issues as both local and global

> such that actors at all levels begin to understand the local in terms of the global and vice versa (Princen et al., 1994, 228).

Such a process of social environmental learning has implications for the sustainability and survival of both human and natural systems (for a comprehensive treatment of the relationship between social environmental learning and sustainability, see Chapter 5.6).

Under conditions of fundamental disequilibrium in these systems, the problem-solving capacity of the mechanisms of collective choice must exhibit the quality of *resilience*. Resilience refers to their "ability to steer human and ecological systems back to normal operating range" (Dryzek, 1987, 54). Ecology movements can be interpreted both as symptoms of and responses to extreme disequilibrium and, as such, their contribution to resilience (problem-solving capacity) is to be found in "their own participatory, self-transforming, trial-and-error approach and adaptability" (Fuentes and Gunder Frank, 1993, 155). The organizational style of green movements endeavours to eschew hierarchy and centralized authority and to replace them with networks reflecting and echoing an understanding of the inter-connectedness and mutual dependence of all beings. Pakulski (1991, 71-76), following Gerlach, has characterized the organizational arrangements of social movements as decentralized, segmented, web-like and polycephalous, consisting of loosely-affiliated cells coordinated by networks which overlap within and between movements. The effect of such an organizational structure is to minimize the impact of failures and to increase movement penetration and innovation, in effect, a more resilient and flexible form of organization.

In their role as agents of societal transformation, green movements have attempted to improve the quality and adequacy of political debate, a primary referent for high quality *self-corrective feedback* in mechanisms of social choice. Their own efforts at participatory, grassroots democracy have also given them a more *flexible* response to new issues as they arise, something not possible for the rigid organizational structures of traditional interest intermediators (Kitschelt, 1989, 248).

Like other social movements, green movements represent a response to processes of increasing societal differentiation and of the consequent need to move beyond traditional political parties (Kaase, 1990, 98), in which, as previously discussed, policy-making is centralized and oriented to short-term, immediate possibilities, leading to the short-circuiting of feedback loops (Dryzek, 1987, 123).

Because movements articulate values involving the common good and their actions are public-oriented (Pakulski, 1991, 74), they encourage political actors to look towards long-term possibilities and accept responsibility for the consequences of their activities. In so doing, they highlight deficiencies in the overall patterns of decision-making. Thus in bringing to public attention the long-term environmentally degradational effects of old-growth forest logging on stable forest ecosystems, movement activism has forced logging companies and supporting politicians to justify not only methods and rationales, but has also elevated to the political arena wider questions of social concern including declining employment consequent on technological innovation.

As monitors of the outputs from centralized systems of political decision-making, green movements highlight the distortions in feedback mechanisms in elite-centred representative democracies, particularly those prone to corporatist tendencies (Dryzek, 1987, 120-122). Further, they play a role in not only experimenting with sustainable forms of organization and existence, but they also target unsustainable practices and promote sustainable ones. Again, the question of clear-fell logging of native forests to supply woodchips exports for paper production in Japan illustrates the transboundary implications of environmental degradation in one jurisdiction for another, when woodchips converted into paper contribute to waste disposal problems in the receiving country.

It is now possible to make some assessment of the contribution of green movements to sustainability, to the ecological rationality of social choice mechanisms, and their contribution to the latter in coping with conditions of ecological crisis. Their role can be summarized as a threefold one: *alerting and informing, monitoring and enforcing,* and *exemplifying.*

In raising public awareness and informing public opinion, they have been responsible for improving the quality of political debate (Frankland, 1988; Hay, 1992; Papadakis, 1993a; Pelinka, 1987) as well as removing some of the distortions in public discourse which are almost inevitable in elite-centred decision-making processes. They have also been responsible for drawing attention to the risks for survival from continuing to pursue unsustainable practices and, in alerting citizens to the possibilities of ecological catastrophe, they have clarified the connection between citizens' actions at the local level and the global consequences of those actions. In addressing the political sphere with their concerns they have also politicized ecological relationships and their biophysical limits.

As monitors of resource exploitation and self-appointed enforcers of environmental agreements, treaties and regulations, they oblige decision-takers in economic and political spheres to shoulder the responsibilities of their office. They are able to take the long-term view and emphasize the common good that the structural limits of the systems of money and power often hinder those with executive power from taking into account. In this function at the transnational level, environmental social movements fill the niche that nation-states with their imperatives of industrial economic growth and national security simply cannot, in addition to which the coordination necessary to tackle the transboundary and multidimensional character of environmental problems is beyond the latter's function.

In their exemplary role, they provide alternative modes of thought and behaviour and exemplify less harmful ways of interacting with natural systems. Organizationally the stress on grassroots participation, nonhierarchical and decentralized decision-making processes, and loosely-organized overlapping networks makes for more flexible and adaptive arrangements which help to minimize failure and improve problem-solving capacity.

In these three roles, it is possible to see improvements in the number and the quality of negative feedback loops, that is, through improving the quality of political debate, the quality of political information, and the introduction of long-term considerations and the common good to the political agenda. The emphasis on the political nature of transboundary linkages and on the significance of the local for the global contribute to improved coordination both within and across choices, while advances in understanding in this area lead to reduction in problem displacement (Dryzek, 1987, 16-20). Elements of flexibility are interpolated into the rigidities resulting from the monocultures of modern society through alternative practices and organizational forms. The alternative worldview of green adherents, which stresses working with nature not against it and from which originates an organization and practice attempting to recreate in human systems the qualities of sustainable ecosystems (adaptability, flexibility, self-corrective feedback, and minimization of dysfunction), helps to promote social environmental learning and, in the long-run, resilience in human and natural systems.

2.3.4 Impediments Facing Progressive Social Movements

The account presented so far in this research project is, like that of most theorizing about new social movements, an optimistic one. Theorists of new social movements, for the most part, envisage social movements as progressive agents of social change and consequently ignore those regressive movements that have formed on the far right of the political spectrum in opposition to change. As yet there has been little theoretical development in this area of scholarship. It is an area that ecological theorists need to address as part of developing a more comprehensive understanding of social and environmental change.

What follows is an attempt to provide a realist account of the problems confronting green movements both with respect to their internal organization and in relation to processes of global restructuring. A survey of the literature detailing the experiences of American and European movements reveals a number of commonalities and differences in the problems, dilemmas and obstacles that confront green movements, particularly when they seek to establish in the formal political sphere.

Globalizing processes and their preconditions present particular difficulties for the aspirations of green movements. Both the proliferation of sovereign states – or, what Bauman (1998, 67) refers to as "the renewed emphasis on the 'territorial principle'" – and public authorities' abrogation of political decision-making to free market processes have consequences for movement aspirations to influence decision-making in political and economic spheres. According to Bauman, the political fragmentation and disempowerment which has occurred simultaneously with the globalization of the economic sphere is not just coincidental. There is an intimate relation between disempowered states and highly mobile capital. Where collective decision-making processes are weak, there are fewer controls on the fluidity of capital movement. Thus just when strong collective decision-making mechanisms are needed to confront conditions of mounting social and ecological crisis, they are found to have been undermined by processes of deregulation, privatization,

liberalization, reductions in business taxes, and windbacks in environmental controls. Not only is the capacity of the political sphere (which has become synonymous with the state in modern society) to address what are essentially collective problems enfeebled by these processes, but so also have they weakened the capacity of the state to influence the economy. Against such a bleak outlook, for ecology movements to pursue the rejuvenation of civil society as a way of redressing the balance, appears the most prospective solution to the difficulty of "reforg[ing] social [and ecological] crises into effective collective action" (Bauman, 1998, 69).

Additionally, not only has collective capacity been weakened by globalizing processes, but so also have individual capacities and values been skewed to fit the demands of market-driven economic regimes. Radical individualism and heightened competition promoted by the dominant neoliberal economic regimes run counter to the collective wellbeing focus which environmental problems demand. The Italian experience suggests that the side-effects of globalizing processes – insecurity, unemployment and rising living costs – have the capacity to overshadow voters' concerns for environmental problems and to engineer a shift in support to right-leaning politics or as Martin Rhodes (1995, 307) puts it: to be "seduced by the neomaterialist allure of the right". Rhodes demonstrates by means of a breakdown of Italian voters by age group that a neomaterialist, individualist ethos is prevalent over a postmaterialist ethos, especially among younger voters, a development that does not augur well for the reproduction of a green electorate (Rhodes, 1995, 310).

New social movements are not only confronted with problems generated by global processes, there are also difficulties and dilemmas that result from their internal ideologies and are peculiar to their organizational form. These features, inherent in the social movement as a form of collective organization, while they ensure the persistence of the movement as such, are problematic for its penetration of and proper functioning in the political sphere. These include the emphasis on grass-roots principles, their anti-institutional character, and tendencies towards fundamentalism and discontinuous patterns of participation. Additionally, a

preoccupation with local and national issues among national movements has also been identified as a short coming in the global context (Lustig and Brunner, 1996).

The difficulties of translating the grass-roots project to the formal political sphere when green movements seek to organize as political parties has occupied the attention of a number of commentators. And not without good reason, since the experience of green parties has shown this translation to be particularly problematic. There are number of problems that are intrinsic to this project. Firstly, as discussed by Pakulski (1991, 209ff.), green parties are subject to divisiveness and fragmentation due to an inability to develop the necessary "programmatic coherence". As long as they remain as movements, social movements can afford a certain degree of "programmatic vagueness" which masks the value intensities felt by movement adherents. Disunity among various French green factions and the consequent failure to build a coalition for political ecology has been accepted as the reason for the poor showing of Greens in the national elections earlier this decade (Faucher and Doherty, 1996). Similarly, the failure of the German Greens to gain entry to the first all-German parliament following reunification has been attributed, not only to their indecisiveness and petty-mindedness in relation to unification, but mainly to distrust and therefore disunity among Greens (Wiesenthal, 1998, 177). The main consequence of green parties' disunited image is the failure to mobilize the kind of support base that they could be expected to enlist (Pakulski, 1991, 209). Contrariwise, their better performance in municipal elections can be put down to the local nature of issues and the 'not-so-much-at stake' factor (Faucher and Doherty, 1996).

Additionally, fragmentation may undermine the capacity of green parties to progress the expectations of their supporters resulting in evaporation of movement support and ending in over-reliance on the parliamentary party. As a consequence movement politics becoming synonymous with the party political organization. The weakness in this scenario is that in electorally unfavourable times there is no significant extraparliamentary movement for support or as resource for new ideas,

topics and strategies. Lustig and Brunner (1996, 137) note the importance of building strong grass-roots links for just these reasons.

A further contributor to the divisiveness appearing to afflict green parties is a factor which is likely to beset any radical political grouping and that is a "central line of tension" between the need for party leadership and discipline and allowing genuine grass-roots input (Hayward, 1994, 192). The fact that the German Greens have found it necessary to abandon many of the mechanisms which were intended to ensure grass-roots control of the parliamentary party has led commentators to conclude that marrying the radical democratic principles of the grass-roots project with the demands of party political organization may be inherently problematic (Hayward, 1994, 193).

Secondly, strict adherence to the principle of grass-roots democracy may paradoxically subvert the claim to viable democracy. As a precondition for intervention in society, Wiesenthal (1998, 174-7) identifies the "well-considered balancing" of a number of democratic principles – including representation, participation, pluralism and accountability. When grass-roots participation is the dominant principle, the desire to participate may be satisfied but the motives for participatory involvement may remain unsatisfied. Thus, while the participatory principle may satisfy self-fulfillment motives, other long-term collective goals, the attainment of which is facilitated by other principles, remain unrealized. Efficiency and effectiveness are then sacrificed for identity and legitimacy. Hayward (1998, 193) identifies inefficiencies in green parties' openness and the requirement to engage in discussion until a consensus is reached, by which time the number of people actually remaining to take the final decision may be "only a small and unrepresentative sample of party members" (Goodin, 1992, 142). Moreover, participants in grass-roots democratic decision-making cannot be held accountable for their decisions.

Effectiveness may also be impaired by the rotation principle which may cost in terms of loss of expertise, preventing the accumulation of experience and the

establishment of "stable informational and communicative links" either inside or outside the party with other actors (Wiesenthal, 1998, 175). The American experience suggests that institutional memory and accumulated expertise are critical factors for strategic effectiveness in social change and that their absence may be related to a failure to instantiate effective evaluative and planning mechanisms (Lustig and Brunner, 1996, 133). Strict adherence to these principles by the German Greens has led Wiesenthal (1998, 177) to conclude that:

> The things that would be efficient, the fostering of creativity, the ability to communicate and co-operate, the delegation of responsibilities for a fixed term, the acknowledgement and corroboration of successful work are considered illegitimate.

Thirdly, the grass-roots project is paradoxically prone to the 'iron law of oligarchy' just as orthodox parties are, although not for the same reasons. The German Greens' original desire to exert grass-roots control over the party leadership has in fact been subverted by the peculiar composition of its membership. The tendency for traditional party organization to develop a division of labour, power hierarchies and to concentrate expert knowledge, all of which alienate party leaders from the wishes of the membership, is not the case with green parties. Leadership oligarchies develop for a different and paradoxical reason. Green party members, as Offe (1985) demonstrates, belong to the middle class and as a consequence possess high education levels, access to information and the resources necessary to articulate their needs within the party. They, therefore, have a relatively good chance of influencing party decision-making (Wiesenthal, 1998, 175). As noted previously, reasons for participation may involve both self-fulfillment motives as well as high expectations of effectiveness in political action. Yet, as Wiesenthal (1998, 175) comments, the preconditions for ongoing commitment can hardly be satisfied where party life makes excessive demands on individual members – that is, "by having meetings dominated by ideological controversies and an excess of formal issues". Under these conditions, the commitment of 'average' party members dissipates with the result that a characteristic feature of green parties is discontinuous participation

and shifting involvement. Wiesenthal (1998, 175) summarizes the oligarchic tendencies of green parties thus:

> The formal application of the principle of rotation, of the incompatibility rule, and of various other forms of 'grass-roots monitoring' of elected representatives produced the same sort of tendencies to alienation and detachment as are claimed for a rigid ruling hierarchy. Instead of a lively organizational democracy, what often developed was a 'culture of distrust'.

Hayward (1994, 193) also proffers the view that it is likely that the introduction of grass-roots principles into the parliamentary sphere cannot be accomplished without some modifications to those principles and loss of consistency. As he remarks: "whilst the German Greens went into parliament with the aim of changing the system, the system also changed them". Dogmatic adherence to grass-roots principles is therefore probably inherently problematic under conditions where compromise is the essence of political achievement.

Allied with the centrality of grass-roots principles in ecology movements *qua* parties is a tendency towards fundamentalism which has a number of implications for effective political intervention. Firstly, fixation with identity issues generates a number of tensions which blunt effective criticism. The resulting fragmentation creates competition rather than cooperation within the party and consequently produces a disunited image. Both the French and German Greens paid the price for failure to address this shortcoming with severely reduced representation at the national level. Wiesenthal (1998, 170) also blames the fundamentalist-realist tension for the political disadvantage suffered by the German Greens at the hands of social democratic parties, which are able to present themselves as concerned with environmental and social issues thereby capitalizing on the disarray amongst the Greens.

Secondly, an ideological fixation with leftist thought has also blocked an effective "elaboration of all those proposals which aim at loosening society's dependence on economic development and thus damage the vested interests of workers as well" (Wiesenthal, 1998, 174). Wiesenthal (1998, 173) argues that the contest for voters between the German Greens and the Social Democratic Party combined with the leftist background of many supporters ensured the persistence of an anti-capitalist stance and a preoccupation with workers' conditions (although laudable) with the result that other issues of practicable environmental reform, such as energy policy, waste generation and disposal, and transport, were sidelined for "radical but politically ineffective criticism". Thus:

> The idea that at the end of the twentieth century capitalism should more appositely be thought of as a kind of drug-dependency of the whole of society, and no longer as a kind of fist-fight involving capital and labour, was one that did not occur to the majority of Green politicians (Wiesenthal, 1998, 174).

A number of authors draw the conclusion that fundamentalism and moral reasoning are incapable of sustaining change. To generate alternatives for action and solutions to ecological problems requires that fundamentalist tendencies be held in check. To allow this end ecology parties must allow for a certain degree of ambiguity to be tolerated. Ideological fixation denies the complexity of the world and, more practically, excludes potential supporters with a slightly different position. To effectively influence society demands a sufficiently nuanced understanding of the complexity of conditions such that diverse views can be aggregated into more achievable visions for the future while also furnishing the resources necessary for effecting their advancement.

While there are lessons to be drawn from the European ecology movements' fixation with identity politics in evaluating their effectiveness in generating support for ecological transformation, the preoccupation of American environmental movements with practical environmental issues has also had its negative side-effects.

The tendency of the latter to be reactive rather than reflective because they are too preoccupied with responding to ecological and political crises and because they have failed to instantiate self-reflective mechanisms for evaluation and for planning future visions and projects has also blunted their effectiveness. The primary factor behind this latter shortcoming has been identified as the absence of institutional memory and experience (Lustig and Brunner, 1996). Constantly being engaged in reactive mode leaves no time or opportunity to gather and retain the information needed for self-evaluation and to plan future directions. Consequently American movements are immersed in the present at the expense of global issues and future planning. As a result of their research, Lustig and Brunner (1996, 138) stress the importance for green movements/parties to be more proactive in setting the agenda for public debate including creating alternative visions of sustainable development.

In summary, the conclusion can quite rightly be reached that a politics of identity and a politics of institutional reform are both necessary ingredients if ecology movements are to be effective agents of social change. Strong grass-roots links are necessary as a resource for the development of new ideas, topics and strategies but so also is a representative leadership and a reform strategy needed for effective political engagement.

2.4: Conclusion

Ecology movements have been represented as critics of modernization processes founded on an instrumentalizing, technocratic world-view, that devalues the relationship between human and nonhuman nature. I have endeavoured to show how green movements, as agents of social change, problematize and seek to redefine this relationship. In assessing the sociopolitical transformative capacity of green movements, I have located it in their potential for the invention of alternative approaches to the problems confronting western societies and indirectly the 'developing' world. They have managed to integrate their critique of a modernity grounded on economic growth and technological progress with a radicalized ecological consciousness. In organizing as green parties they have aimed to represent this alternative world-view through the use of a diverse range of conventional and unconventional political strategies and organizational forms. In so doing they have entrained a process that reduces the centrality of political parties in the systems of

policy formation and decision-making and queries the function of established parties in the system of liberal representative democracy. They have similarly sought to open up the policy-making process, endeavouring to wrest it from the control of ruling elites and returning it to the grass roots. The effect has been to upset the balance of consensual politics and expose cosy corporatist arrangements that are not in the public's nor the environment's interest.

Their critique of instrumentalizing modernization processes combined with a radical ecology imbues green movements with the potential to effect fundamental societal transformation. The kinds of innovations and impacts already evident appear to presage a new social and political consensus, although whether the potential is fully realized will depend, among other factors, on the extent to which green counter elites are co-opted and their protest absorbed by encumbent elites and on the resilence of the established forms of political and economic control.

The green movement, like other social movements, has a continuing role to play as a creative critical force in late industrial societies. Part of that function is to assist the environmentally less aware and less sensitive to reappraise their values and their practices, thus to reform consumer preferences and behaviours and promote global social environmental learning. Green movements also have a role to play in encouraging the institutionalization of self-criticism in all the spheres of human endeavour, but they must also recognize and reconcile the tensions between pragmatists and fundamentalists in their own organizations. This will entail developing structures and mechanisms which facilitate the creativity of self-critical tensions and minimize their destructive aspects. It is the kind of example which other spheres of society, including the spheres of subpolitics, require in generating less harmful relationships with natural systems and forging more sustainable links.

In problematizing the instrumentalizing, technocratic world-view, ecology movements function to reactivate the normative dimensions of politics submerged with its elision into economism. They articulate an alternative modernity wherein instrumental rationality, objectivist science and technology can be more truly steered according to social and ecological purpose. The example that ecology movements provide is in their exercise of a practical reason, which encompasses a moral connection to nature.

In short, green movements and parties do contribute to the sustainability of human and natural systems and to the design of social choice mechanisms more

appropriate for sustainable living. However, to creatively and effectively progress the green agenda in the political context, the instantiation of reflexivity mechanisms – institutional memory, self-critical scepticism, opportunities for recursive social learning and for cooperation – is a necessary precursor for the planning of future visions.

CHAPTER 3

TOWARDS A REFORMULATION OF THE ECONOMIC PROBLEM

> Ecological problems disclose just how far modern civilization has come to rely on the expansion of control, and on economic progress as a means of repressing basic existential dilemmas of life (Giddens, 1994, 212).

3.1: Introduction

It was asserted in Chapter 1 that modern economic theory does not do justice to the many dimensions of the human condition; nor has mainstream economics yet been able to integrate ecological insights into its body of theory, except in a peripheral way through the discipline of environmental economics. The narrowness of its foundational principles and its imperialistic want are encapsulated in the following quote by Berman (1981, 189):

> The idea of mastery over nature, and of economic rationality, are but partial impulses in the human being which in modern times have become organizers of the whole of human life.

The foundations of mainstream neoclassical theory are supposedly to be had in Adam Smith's *Wealth of Nations*, where he purportedly advanced the view that social organization is most efficiently achieved by persons pursuing their own rational self-interest in a freely competitive market[31]. However, in an earlier treatise, *The Theory of Moral Sentiments*, Smith had advanced a contradictory view, in which he observed that people often act from non-selfish or altruistic motivations:

> How selfish so ever man may be supposed, there are evidently some principles in his nature, which interest him in the fortunes of others, and render their happiness necessary to him (Smith, 1976[1759], 9).

This text is recognized by the alternative stream of humanistic economists but largely ignored by neoclassical economists. To understand why *homo economicus* of the *Wealth of Nations* triumphed over *homo moralis* of the *The Theory of Moral Sentiments*, we must have recourse to the social, political and environmental milieu of the seventeenth and eighteenth centuries.

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[31]A. K. Sen (1987) argues, contrary to the neoclassical interpretation and application of the doctrine of self-interest, that Smith recognized the value of self-interest to be confined to certain transactions and particularly where trade or production were hampered by bureaucratic or other obstacles. Indeed he asserts: "Smith did not assign a generally superior role to the pursuit of self-interest in any of his writings" (Sen, 1987, 25).

This chapter will firstly outline the transformation of the feudal moral economy to a self-regulating market economy, and the ensuing relinquishment of ethical considerations and political decision-making to the latter; secondly, it will trace the beginnings of the alternative tradition of economic theory from the early dissenting political economists through to more recent developments in political economy, ecological economics, development economics and living economics, emphasizing both the ecological and ethical basis of their challenge to the foundational assumptions of neoclassical economics; thirdly, it will explore why an ethical dimension should be restored to theories which ground systems of production and consumption; and fourthly, it will assess the ethical content of sustainable development as a strategy for achieving the goal of ecological sustainability.

3.1.1: From Moral Economy To Self-Regulating Market Economy

The economic institutions of liberal capitalism - banks, markets, commercial and industrial corporations, and consumers - were spawned by a unique constellation of historical conditions, but as many commentators argue, its contemporary manifestation of welfare state capitalism is manifesting signs of crisis and symptoms of inadequacy (Lash and Urry, 1987; Offe, 1984; Pierson, 1991). My argument is that these institutions are not capable of addressing the problems which confront the late twentieth century and those features of early capitalist markets which were virtues have now become liabilities threatening the survival of the biosphere. In the clear light of ecological awareness, the assumptions and values of productivist market economics appear to be inherently flawed. This section documents the value change which occurred when the moral economy of premodern feudal times was replaced by the self-regulating capitalist market.

The emergence of a consumer society in the late eighteenth century and the preconditions for a self-regulating market are the subject of a text by McKendrick, Brewer and Plumb (1982). McKendrick (1982) details a slowly evolving transformation in attitude away from disapproval of self-indulgence as a product of circumstances peculiar to the seventeenth century[32]. This attitudinal change formed

[32]The influx of cheap Indian calico in the 1690s represented a challenge to the prevailing orthodoxy, that is, that self-indulgence was sinful. There developed an acceptance among some sectors that there were social goods to be had from "competition, envy, emulation, vanity and fashion" (McKendrick, 1982, 15), but boundless consumption presented too many political and moral problems to be widely accepted. Politically, self-improvement through spending implied a social mobility which represented a threat to the ruling classes, while morally the work ethic based on self-discipline and "purposeful activity" was likewise threatened by what seemed to be no more than a "calculating hedonism" (p.16). The idea of a prosperous economy being driven by increasing consumpton was not really accepted intellectually until around 1770 in the new formulation of the economic problem by Adam Smith,

the basis for the eventual acceptance of increasing economic output and consumption as the vehicle for social progress in the second half of the eighteenth century. Simultaneously, individual self-interest gained increasing acceptance as the means to free the economy from feudal constraints.

Accompanying this profound change in society's value structure was a parallel shift in the study of relations of production and consumption. Under Adam Smith the foundations for the study of economics as an autonomous science were laid and were further progressed and cemented by Jevons, Marshall and others in the neoclassical period of the nineteenth century (Lutz and Lux, 1988). These developments together resulted in the divorce of the study of economics from non-economic ends, that is, the political, social and environmental context of its organizing activity, and for the substitution of unlimited economic growth as the legitimate ideology of its activity (Kassiola, 1990, 69-70).

Yet, it is important to note that, when Adam Smith proposed his idea of the *invisible hand* on the basis of each person attending to their own interests as the means of ensuring the public good, he did so in the knowledge that there remained in place the whole array of

> moral concerns and sentiments which served as the protective and guiding social framework within which material self-interests were allowed to operate. Capitalism, in its infancy, had inherited substantially intact the whole religiously based structure of trust and fairness that was the code of feudal (pre-capitalist, pre-industrial) life (Lutz and Lux, 1988, 314)[33].

Still, the adoption of what were previously considered vices as virtues represented a challenge to the guiding ethical framework of Christianity and the moral economy that had gone before, summarized succinctly by E. P. Thompson (1971, 136) thus: "The breakthrough of the new political economy of the free market

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when "the pursuit of luxury could now be seen as socially desirable, for as the growth of new wants stimulated increased effort and output, improved consumption by all ranks of society would further stimulate economic progress" (p.19). Further, the acceptance of the intellectual justification of materialism was being matched by the actual democratization of consumption (p.25). McKendrick documents extensive empirical evidence for a significant consumer revolution in the late eighteenth century. He sets the attractions of the newly emerging consumer society against a background of a poverty-stricken Europe, in which even the average family spent 70-80 per cent of its income on food and little remained to satisfy other basic needs, where life was marked by sickness and disease, low life expectancy, high infant mortality, poor diet, and few if any comforts (p.31).

[33]See also Kumar (1983) on the pre-capitalist, pre-industrial framework underpinning the early development of the capitalist economy.

was also the breakdown of the old moral economy of provision"[34]. The revolution in values represented by the emergence of the free market and of a consumer society is similarly captured by Lewis Mumford (1966, 277):

> [T]he new capitalist spirit challenged the basic Christian ethics ... The capitalist scheme of values in fact transformed five of the seven deadly sins of Christianity - pride, envy, greed, avarice and lust - into positive values, treating them as necessary to all economic enterprise; while the cardinal virtues, beginning with love and humility were rejected as 'bad for business', except in the degree that they made the working class more docile and more amenable to cold-blooded exploitation.

Those values which in premodern societies had served to justify and limit economic activity, values derived from politics and ethics, were replaced by "a motive only rarely acknowledged as valid in the history of human societies, and certainly never before raised to the level of justification of action and behaviour in everyday life, namely gain" (Polanyi, 1957, 30). Concomitantly, those purely instrumental economic means, justified and limited in premodern times according to social ends, became intrinsic ends in themselves.

However, while the poor may have derived some comfort from the constraints of the feudal moral economy, the commercial class, which had burgeoned during the mercantilist period, increasingly felt and resented the strictures and corruption of the client-patronage system. Indeed, the emergence of the free market must be understood in the context of aspirations both for material and social betterment and accompanying aspirations for political freedom and individual autonomy. In the vanguard of the radical political movement was what McKendrick (1982) calls the "middling sort", the traders, merchants and shopkeepers who, in the eighteenth century, were very much dependent on the client-patronage economy controlled by the aristocratic class. In fact, through their purchasing power and patronage, the latter exercised almost complete control and the system was thus open to abuse. The lack of freedom and resentment is described thus:

> Clients in the client economy were not 'free' but tied, no matter how discreetly, to their patrons. Moreover the client economy compounded one of the greatest problems that faced the eighteenth

[34]The moral economy of feudal England was grounded in a consensus about "a consistent traditional view of social norms and obligations, of the proper economic functions of several parties within the community, which taken together can be said to constitute the moral economy of the poor" (Thompson, 1971, 79). It was neither political nor unpolitical, but involved definite notions of the common weal.

> century tradesman, namely that of credit and debt. The patricians simply passed on their own indebtedness to the trader by taking credit and failing to pay their bills promptly, or sometimes, not at all. No grievance was felt more strongly than this hidden subsidy to aristocratic wealth (McKendrick, 1982, 198).

Added to this particular grievance was the increasing imposition of taxes and duties on basic commodities, taxes which appeared to be propping up a system of graft and corruption and idle aristocratic luxury. The attractiveness of an alternative to the clientage system, one which would ensure independence from the economic/political control of the aristocrats, is therefore easily comprehended. The conditions for the emergence of this alternative regime were in place by the late eighteenth century - a shift in the structure of wealth (generated by the formation of voluntary associations and the regularization of credit), the growth of bourgeois consumerism, the democratization of taste, and the advent of a broadly-based home market for the products of the newly established manufacturing economy (McKendrick, 1982, 200).

The vehicle driving the creation of the free market alternative to the client economy is to be found in the formation of voluntary associations by various commercial interests. Thus:

> Collective action through voluntary associations conferred on these organizations a degree of power as well as financial and political independence which their members had not previously enjoyed. Association became a way of escaping economic clientage whilst providing protection against the vicissitudes of the open market; it also served to free citizens from the constraints of patrician political patronage and control. *The opening up of politics and of enterprise went in tandem*; in the eyes of the predominantly urban and bourgeois groups, the two were seen as interconnected problems whose solution was mutually reinforcing [my italics] (McKendrick, 1982, 200-201).

Independence from the client economy meant freedom from coercion and from irrational state control. In these circumstances, the impersonal master of the market economy seemed an eminently more attractive alternative. For the commercial interests of the eighteenth century the free market represented in essence a form of anonymous control and it is my argument that it is this very anonymity together with later developments in economic theory which underlies the irresponsibility of liberal democratic capitalist societies. For anonymity plus the emphasis on individual rights and self-interest made it possible for individuals

(including corporations as holders of private property rights) to hand over their social responsibilities to what was perceived to be a non-arbitrary, incorruptible and self-regulating mechanism for organizing economic life.

The validity of this particular productive system based on the self-regulating market was, moreover, enhanced by the efforts of Adam Smith. Under the influence of Isaac Newton's law of universal gravitation, Smith brought the legitimacy of science to the new discipline of political economy when he endowed the concept of the invisible hand with much the same status as gravitation enjoyed as a universal force in Newton's mechanistic science (Lutz and Lux, 1988, 37).

The replacement of the social purpose of economic activity by the notion of economics as mechanism and by the idea that the common weal would be served by individuals pursuing their own interests has been explained by R. H. Tawney (1982 [1921], 15-17) as an understandable reaction to the processes of social and economic degeneration which reached breaking point in the mid eighteenth century. There were a number of simultaneous and interconnected processes occurring which spelled "the disappearance of the idea that social institutions and economic activities were related to common ends" (Tawney, 1982 [1921], 17). Firstly, in response to the Reformation during the eighteenth century both Church and State abdicated their role as guardians of a commonly accepted body of social ethics; and secondly, social, economic and political institutions had so degenerated to levels of tyranny, capriciousness and corruption in their practical operation (as previously mentioned) that people could no longer trust in them as embodiments of ethical criteria. It was not surprising then, that, in the course of rejecting such oppressive, arbitrary and corrupt institutions, "the individual is emancipated and his rights enlarged; but the idea of social purpose is discredited by the discredit justly attaching to the obsolete order in which it is embodied" (Tawney, 1982 [1921], 15-16).

More recently, the emancipation of economics from ethical purpose and from politics has been argued by Kassiola (1990, 64) to be a direct outcome of the effort to make a science of economics. Although the antecedents were set by Adam Smith, the process was not fully developed and concluded until later in the nineteenth century with the marginal utility revolution of the neoclassical economists. The big questions addressed by the classicists concerning the distribution of wealth and income were replaced by the small questions concerning the economic behaviour of small decision-makers - households and firms - and the relative prices of goods and services. Hence the focus of economic theory shifted from the causes for

distributional patterns to the operations of the free market, or as Kassiola (1990, 66) describes it, from the "socio-political" to the "purely economic, internal market causes of relations of exchange".

However, the loss of social purpose and the ethical responsibility of economic activity in the process of asserting individual rights and political freedom is not to be blamed entirely on the eighteenth century philosophers. As Tawney (1982 [1921], 22-23) also observed, the supreme motivating idea for the liberal bourgeois movement was the necessity to attack the tyranny and corruption of privilege:

> The great individualists of the eighteenth century ...shot their arrows against the abuses of their day, not of ours. ...When they formulated the new philosophy, the obvious abuse was not the power wielded by the owners of capital over populations unable to work without their permission; it was the network of customary and legal restrictions by which the landowner in France, monopolistic corporations and the State both in France and England, prevented the individual from exercising his powers, divorced property from labour, and made idleness the pensioner of industry. ... [The ideal of this age of enlightenment was] a society where each man had free access to the economic opportunities which he could use and enjoy the wealth which by his efforts he had created. That school of thought represented all, or nearly all, that was humane and intelligent in the mind of the age. It was individualistic, not because it valued riches as the main end of man, but because it had a high sense of human dignity, and desired that men should be free to become themselves. And the vulgar commercialism [which subsequently emerged] derived half its strength from the fact that the philosophy behind which it sheltered was not that of reaction, but of enlightenment.

Moreover, this was an enlightenment which had crystallized its precepts under simpler preindustrial economic conditions, including categories of private property and freedom of contract, which were transported uncritically and with their effects unanticipated to the era of industrial capitalism. Adam Smith and his classical contemporaries could not be expected to foresee the aberrations which would grow out of doctrines conceived to better the lot of society. Although in hindsight they should have been able to anticipate that the unlimited accumulation provisions of property rules would inevitably result in overaccumulation, they could not foresee the global power of transnational corporations which presently benefit from these reforms of the early modern era.

Although we can rationalize and understand the desire of those early liberals to attack and escape from the constraints of feudal privilege, this is not to ignore the implications of the change from regulated to self-regulating markets for the structure of society, and ultimately for the existence of life itself. Karl Polanyi (1957, Ch.6) has best described the significance for western society of this particular development. The establishment of self-regulating markets in the late eighteenth century represented a singular departure from what had been the previous relationship between markets and society: "... never before our time were markets more than accessories of economic life [and] as a rule, the economic system was absorbed in the social system" (Polanyi, 1957, 68). Even under the mercantile system, markets were highly regulated by a "centralized administration which fostered autarky both in the households of the peasantry and in respect of national life" (Polanyi, 1957, 68).

However, the shift to the self-regulating market with its underlying assumptions - that all production and distribution of goods was to be controlled, regulated and directed by markets alone - was to have implications reaching far beyond the organization of economic life. It required not only the separation of society into political and economic spheres, but also the subordination of other spheres to its demands. Further, not only were the products of industry and their distribution controlled by this novel institution but it required the control of the elements of industry - land, labour and capital (money): "But labor and land are no other than the human beings themselves of which every society consists and the natural surroundings in which it exists. To include them in the market mechanism means to subordinate the substance of society itself to the laws of the market" (Polanyi, 1957, 71).

This development in social history, Kassiola (1990) has labelled "economism", but paradoxically, it is the abstraction of economic thought from its social and biophysical context which Daly and Cobb (1989, 51) describe as "the greatest threat to a market society". The anonymity and self-regulatory aspects of the market mechanism were a powerful attraction for the commercial bourgeoisie of the late eighteenth century, but they and the classical economists could not foresee that, in surrendering the responsibility for social purpose to the invisible hand, ultimately such economic arrangements develop an inherent tendency to erode the moral and social foundations which are integral to its proper functioning.

Albert Hirsch first drew attention to the dependence of the early success of market capitalism on the persistence of a "premarket social ethos":

> The social morality that has served as an understructure for economic individualism has been a legacy of the precapitalist and preindustrial past. This legacy has diminished with time and with the corrosive contact of the active capitalist values ... . As individual behaviour has been increasingly directed to individual advantage, habits and instincts based on communal values and objectives have lost out (Hirsch, 1977, 117).

The social virtues which this "individualist ethos" are seen to undermine and which are at the same time central to the proper functioning of the "individualist, contract economy" include truth, trust, acceptance, restraint and obligation. Lutz and Lux (1988, 84-85) have since described the erosion of truth and loyalty by self-interested behaviour and have shown how vital the mutual cooperation based on these traits is to large-scale economics. They evidence the widespread and growing use of legal procedures and litigation as parties try to protect themselves against being taken advantage of, the result being the multiplication of "red tape" in economic transactions and ultimately "economic gridlock".

Daly and Cobb (1989), too, have since reiterated Hirsch's insights; in addition, pointing out the connection between the market's tendency to deplete "moral capital" and its parallel depletion of "biophysical capital". They contend that the dependence of the market on these values and "other virtues ... will not long withstand the reduction to the level of personal tastes that is explicit in the positivistic, individualistic philosophy of value on which modern economic theory is based. If all value derives only from satisfaction of individual wants, then there is nothing left over on the basis of which self-interested, individualistic want satisfaction can be restrained" (Daly and Cobb, 1989, 50-51). The market does not accumulate moral capital; it depletes it. Consequently the market depends on the community to regenerate moral capital, just as it depends on the biosphere to regenerate natural capital. In effect the individual, the community and the biosphere have all been diminished by the "individualist ethos" of the market economy and by the maximization of the individual freedoms which accompanied it. As Pirages (1977, 9) observed, maximizing individual freedom under conditions of limited growth "inexorably lead[s] to a loss of freedom for the collective and even to self-destruction".

In the late eighteenth century, when a reformulation of the economic problem was demanded, it was thus achieved through a particular set of politico-economic

terms, in that the collective wellbeing was deemed to be had in each individual looking to their own interests while maximizing individual freedoms:

> [I]t appeared that maximizing individual freedom was the best way to maximize gain for the collective. Only a minimal amount of mutual coercion mutually agreed upon was essential to progress, given the open frontiers and rapid economic growth of the early industrial period (Pirages, 1977, 9).

Limiting environmental conditions were not really at issue and when they appeared they were restricted to the local. The limitations of resource availability were not really a consideration and under these conditions the economic problem was one of maximizing output for any given level of resources. It was not until later in the nineteenth century, when the prospect emerged of running out of coal to power industry, that Jevons redefined economics as the science of maximizing output under conditions of scarce resources. But the problems of distribution and consumption which also emerged with the prospect of scarce coal resources were postponed by the discovery of an alternative energy supply - petroleum (Lutz and Lux, 1988, 316-317). It has become obvious that the consequences of the era which derived from the fossil fuel subsidy (the hydrocarbon age), including global environmental degradation and global inequalities of wealth, demand a new formulation of the economic problem.

In the late twentieth century, the limiting conditions revolve around resource depletion, waste assimilation capacity, and intra- and intertemporal inequalities, and they manifest at local, national and global levels. It is argued that the reformulation of the economic problem that is now necessitated involves an explicit redefinition of both individual and collective interest. Lutz and Lux (1988, 317) maintain that, at each stage of the redefinition of the economic problem through the last two centuries, the neglect of ethical issues has resulted in an accumulating legacy of crisis and disaster, summarizing thus:

> The big push towards development did not bring us the promised social harmony. Furthermore, the vanishing moral foundations of society has demanded that an increasingly complex, stifling, and inhumane system of rules and regulations be put in place. Through the same ignorance we have developed an economy with an insatiable appetite that threatens to eat away the thin mineral crust of the earth's surface out from under us.

However, at the end of the twentieth century, the economic problem is more than the achievement of controlled growth or a steady-state economy as they suggest. As in

the late eighteenth century, it is the politico-economic one of the reformulation of what we conceive individual freedom to be under conditions of resource depletion, global ecological deterioration, and vast inequalities of wealth. It is therefore the inherently existential question of 'How should we live?' and the ethico-moral question of 'How should we arrange our systems of production and consumption to ensure the sustainability of the earth?' These existential questions, long submerged by the neoclassical ideology of unlimited growth and boundless consumption, once more press their claims for the reinstatement of a normative dimension to both economic and political spheres. Under the ecologically limiting conditions articulated above, the normative dimensions of these questions, as I shall subsequently argue, must be undergirt by the ethical value of responsibility, also obscured under the liberal capitalist order by the emphasis on impersonal political power and through economic reductionism, that is, by abdicating responsibility to the impersonal mechanisms of the self-regulating market.

3.2: Ecology And Ethics In An Alternative Economics

It was not long into the industrial revolution before a dissenting discourse was heard in the new science of political economy. The earliest origins of this dissent have been traced to a contemporary of Ricardo, a Swiss Count Jean C. L. S. Sismondi, who, motivated by the suffering and misery of the masses in a newly industrializing England, developed a view of political economy which, instead of emphasizing wealth (which by this time had become an end in itself), "centred his *New Principles* on human welfare, boldly transforming economics to an explicitly normative discipline" (Lutz, 1992, 91; but see also Lutz and Lux, 1988, 64-68). It is this normative aspect of economic theory with which the remainder of the chapter will be largely concerned. Sismondi's work on political economy was to inspire Thomas Carlyle and later John Ruskin. Ruskin criticized the abstractionist, scientific turn that economics had taken in the nineteenth century and he replaced exchange value and subjective utility with an understanding of the value of commodities based on the extent to which they satisfied basic human needs. Not surprisingly his "new economics" had a place for moral issues. His work was in turn to influence John Hobson, Mohandas Gandhi, R. H. Tawney and E. F. Schumacher in this century. Hobson and Tawney were both concerned to advance a view of economics as a means to further human dignity and welfare and, what is significant for later discussion, they both held that the institutions of society - political, economic and social - should be regarded as means to an end, not as ends in themselves. That end should be directed to the growth of individual human beings. These institutions

should have the development and cultivation of human potentiality as their primary objective, while economic efficiency should be secondary. And what is most pertinent to later discussion, these "instruments of life ... [are] to be maintained when they are serviceable and changed when they are not" (Tawney, 1982 [1921], 85-86).

Gandhi, also profoundly influenced by Ruskin's 'new political economy of life', endeavoured to develop an economics that was relevant to basic human needs and respectful of the higher values of human dignity, nonviolence and creative work. To Tawney's and Hobson's human welfare economics, he added a spiritual element.

The ethical thread that unites these three thinkers is the stress on human welfare, human dignity and self-actualization, and its spinning was to be extended by the work of E. F. Schumacher in the mid-twentieth century. Lutz (1992, 101) recognizes Gandhi's influence in Schumacher's criticism of the secularity of modern life, in his strategy for a development founded on human needs, on rural development and in his advocacy of appropriate technology. Schumacher's economics, though, added new elements, reflecting the earliest stirrings of fear about environmental degradation and resource depletion. As well, following from his emphasis on the appropriateness of technology and on village-based development, his other novel contribution to an alternative economics is the question of scale and its fitness to levels of human activity. A concern with the scale of organization follows directly from the orientation to people's needs rather than the production of goods as an end in itself and the scale of organization which is most appropriate to human activity is small.

Other contemporary streams of economic thought which endeavour to integrate the social and the economic by blending insights from other disciplines, including sociology and psychology, into economic analysis include the neoinstitutionalists or evolutionary economists, whose work is in the tradition of Thorsten Veblen. They attempt to pattern economic reality according to a cultural or social view, contrary to orthodox economics which more nearly approximates the physical sciences' view of reality (Gruchy, 1972; 1987). This strand is exemplified in the work of Myrdal and Galbraith, but more recent developments in evolutionary economics explicitly seek to reunite individuals with both their social and natural environment. Hodgson (1992, 40-48) has outlined some of the implications of this development for conventional economics. It is a development that challenges the assumption of global rationality and maximizing behaviour and instead, following Freudian insights into the unconscious, argues that actions can take place at different

levels of thought, both conscious and unconscious. While some actions can result from extensive deliberation, others are habitual. The evolutionary basis of neoinstitutionalist economics derives from the work of social anthropologists, which suggests that culture and institutions have a significant bearing on individual decision-making and action[35]. As I shall discuss in Chapter 5.4.1, routinized behaviour has significant implications for institutional inertia and thus for social change.

The interdependence of social and ecological systems is even more firmly linked in Richard Norgaard's concept of the coevolution of society, economics and environment (Norgaard, 1988; 1992). In this coevolutionary framework, Norgaard argues that until the modern era societies evolved along with their ecosystems, behavioural norms, myths and institutions developing to reinforce interactions which were favourable and discourage those which were not. The expanded use of fossil fuels in the nineteenth century - coal and later petroleum - allowed western societies to stop coevolving with their ecosystems and instead

> [s]ocial systems evolved around the expanding means of exploiting hydrocarbons and only later adopted institutions to correct the damage this coevolution entailed for ecosystems. ... Our value system, knowledge system, social organization and technologies coevolved to fit the opportunities which the exploitation of fossil energy provided. Our social systems reflect these medium-term opportunities rather than the long-run opportunities of coevolutionary development with the renewable resources of the global system (Norgaard, 1992, 81-82).

Further, the shift to hydrocarbons has allowed other cultures to stop coevolving with their own unique environments and to adopt the knowledge, values, technologies and institutional arrangements of the west.

In parallel with these contributions to the understanding of economic life which integrate the social, economic and the natural is another stream which attempts to integrate a normative or ethical dimension. It includes the humanistic economics of Mark Lutz and Kenneth Lux (1988; but see also Lutz, 1992) and the socioeconomics of Amitai Etzioni (1988; see also Etzioni and Lawrence, 1991).[36] Humanistic economics relies heavily on social/moral philosophy to inform its view

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[35]See Opschoor and van der Straaten (1992) for a comparison of the assumptions of orthodox economics and evolutionary institutional economics.

[36]For a full account of the affinities and differences between humanistic economics and socioeconomics, see Lutz (1990).

of economics. It builds on Maslow's psychology of human needs to generate a more realistic understanding of the human self, recognizing that duality of motives exists in human beings and that we have both an advantage-seeking, self-interested side and a fairness-seeking, mutual interest side (Lutz and Lux, 1988, 15-19).

Like humanistic economics, socioeconomics has an aversion to the Rational Economic Man of neoclassical economics, positing instead a bi-utility approach to utility maximization, which is akin to the dual self of the former. Significantly the role of values in economic decision-making is accorded validity as well as the values of the social collectivity in influencing individual decision-making. Contrary to conventional economics, the economy is recognized as a subsystem of society, polity and culture, and like the institutionalists, socioeconomics explicitly acknowledges that control *of* the market is closer to reality than control *by* the market. Thus the recognition that "power differences among actors are congenital" adds another countering note of reality to the fictions of orthodox economics (Etzioni, 1988, 4-5).

In the context of this chapter, the primary contribution of Etzioni's "I and We" paradigm in developing an alternative to the amoral rational utility-maximizing individual of neo-classical economics has been to elevate the role of values (normative-affective factors) in influencing the choices people make. These values are said to be normative when they prescribe behaviour. In this sense the "I and We" paradigm differs from mainstream economics, in that it acknowledges that "normative values, as factors that influence the choice of means, help ensure the primacy of ends" (Etzioni, 1988, 106). In modern life, the contrary situation obtains: "...the preoccupation with means, with enhancing their strength, scope, quantity and quality, is the essence of industrialization, market economics and economies, technology, and applied science. However, this preoccupation, through a process known as goal displacement, tends to lead to the primacy of means over ends" (Etzioni, 1988, 107).

The significance of the socioeconomic strand for the present argument lies principally in the concept of the multiple self, derived from deontological psychology, and its implications for the question of public goods, specifically the commons. Etzioni argues that, rather than relying on inherently faulty price mechanisms to internalize the externalities of neoclassical economics, moral commitments are a better way of ensuring that the needs of the commons find their place in decision-making. Indeed, morality is "a more widely used, less costly and

less coercive mechanism for attending to the commons than government inducements or public 'incentives' provided by the market" (Etzioni, 1988, 34).

The last several decades have seen the establishment of a discipline that not only recognizes the importance of integrating environmental aspects into economics, but specifically relies on ecological insights to inform the discipline. This is the discipline of ecological economics, which has a tradition going back to the 1880's (Martinez-Alier, 1987), but has become more prominent recently with the publication of Herman Daly's work on the steady-state economy (Daly, 1977). Daly was responsible for querying the underlying assumptions of the growth paradigm, that any deficiencies in the biophysical fabric could be papered over with more technology and more growth and that greater consumption was the answer to the existential ills of modern society. He urged economic theory to return to its moral and biophysical foundations and challenged it "to develop a political economics that recognizes both ecological and existential scarcity" (Daly, 1977, 4).

In the context of the influence of the natural sciences on economic theory the work of Charles Perrings (1987) on a jointly-determined economy-environment system is particularly relevant. Perrings' challenge to the static environmental assumptions of the mainstream model owes much to Georgescu-Roegen's (1971) work on the implications of the laws of thermodynamics for energy and entropy, specifically the requirement for the conservation of mass. His conclusion that an economy cannot function independently of physical laws bears directly on the static assumptions of the general equilibrium models of neoclassical theory. Thus he argues: "It is the necessity for any system generating residuals in the process of production to change over time, to evolve from one state to the next as the residuals generated in production are returned to the system in either a controlled or uncontrolled way" (Perrings, 1987, 8). Indeed, neoclassical theory rests on the invalid assumption of the conservation of energy, from which it follows that any inputs (land, labour, capital) can be combined or substituted in any way yet the level of output be retained. There is no room in this theory for "energetic (and nutritive) requirements, physical connectivity, technological and social learning, emotional bonding, and positive feedback dynamics of real world production systems" (Christensen, 1991, 79).

Perrings (1987, 11) also explores the inability of the price system to capture environmental resources. But what is most significant for the present discussion is his contribution to the understanding of uncertainty in economy-environment

systems, particularly in the context of unforeseen side-effects, where uncertainty exists in the face of ignorance, novelty and surprise (Perrings, 1987, 11).

To return to ecological economics: to questions of time and uncertainty, the discipline adds a concern for sustainability, equity, dynamics, and the process of institutional change, while the notion of the atomistic individual is replaced by the idea of 'person-in-community'.[37] Christensen (1991, 80) summarizes ecological economics succinctly, thus: "[E]cological economics emphasizes not just the dependence of an economy on its environment but also the internal physical connectivity and interdependence within an economy".[38]

Embracing many of these contemporary counter currents is Paul Ekins' "real-life" or "living economics", which emphasizes the interdependence of all the spheres of human existence - economic, social, ecological and ethical (Ekins, 1986; Ekins and Max-Neef, 1992). It attempts to provide an economic framework by which to understand and redress the widespread social, cultural and environmental disruption of the last 50 years and is concerned to develop an economy that has human welfare as its principle focus. It challenges conventional economics for its failure to provide a coherent explanation of economic reality, particularly regarding the flaws of the market economy, environmental degradation, persistent poverty, and the existence of the informal economy. "Living economics" attempts to coordinate the various alternative strands into a larger framework of economic understanding, "a holistic, enriched economic discourse", linking concepts such as wealth and growth, needs, development, competition, and markets, and reinterpreting them in the context of the ethical, social, cultural and environmental dimensions of human existence.

Ecomarxists and ecosocialists such as James O'Connor (1994b), Martin O'Connor and other contributors to the journal, *Capitalism, Nature, Socialism,* are responsible for additional insights concerning the globalization of capital, while ecofeminists and neomarxists have made valuable contributions to the debate on development and global inequalities of wealth and economic exploitation, particularly their implications for sustainable development in the Third World (Harcourt, 1994; Redclift, 1984; Sachs, 1992; Seager, 1993; Shiva, 1994).

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[37]The collection of papers edited by Robert Costanza (1991) elaborates on all these concepts, while the notion of 'person-in-community' is discussed in Daly and Cobb (1989).

[38]A recent paper which critiques the conservatism of orthodox economists from the standpoint of operationalizing ecological economics is that by Stuart Rosewarne (1995).

3.3: The Case For The Reinstatement Of Ethics

> ... we have tried to solve our existential problem by giving up the Messianic vision of harmony between humankind and nature by conquering nature, by transforming it to our own purposes until the conquest has become more and more equivalent to destruction (Fromm, 1978, 17).

Thus far the argument has established how and why economic activity became divorced from its wider social/ethical context, and how the production principle came to guide ethical considerations in market economies. This section will present a case for the reintroduction of ethical values as guiding principles for the organization of economic activity, for contemporary environmentally limiting conditions necessitate a reappraisal of the human/nature production interface and those existential questions which have, for some time, been submerged by the growth ethic. Contrary to accepted opinion, these problems have not disappeared; the old philosophical questions simply reappear in a new context and their consideration is made that much more urgent by the nature of the crises confronting western societies.

My purpose in this section is to establish a new set of ethical principles as a guide for non-destructive productive activity, which recognizes the fundamental interdependence of all life forms and responsibility for their future survival, for as Hans Jonas (1984, 136) observes:

> A kind of metaphysical responsibility beyond self-interest has devolved on us with the magnitude of our powers relative to this tenuous film of life, that, since man has become dangerous not only to himself but to the whole biosphere.[39]

I argue, following Jonas, that under conditions of extensive ecological modification and humankind's capacity to effect such change, that the normative value of responsibility shifts to the centre of ethical theory. This ethic of responsibility embodies associated values of humility, reverence for life, and caution and foresight as the "core of moral action" (p.38). The ethical goal is the sustainability and survival of the planet's biophysical fabric.

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[39]This section owes a great deal to Jonas' *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* in the formulation of an ethic of responsibility for economic activity. The bracketted page numbers in Sections 3.3-3.3.6 refer to this work.

3.3.1: Old Questions: New Context

The ancient moral questions which earlier societies were able to incorporate within their institutional arrangements, but which the obsession with development and growth has, for a time, enabled western societies to postpone coming to terms with, address the relation between the quality of life and material abundance, the relationship of societies to nature and technology, and the relations of justice within and between societies (Goulet, 1990, 38) What is novel about the context in which these questions resurface is that the peculiar modern conditions which give rise to them have never before been encountered in human history (Goulet, 1990, 39):

> First there is the vast scale of human activities - the size of our cities, bureaucracies and factories, the sheer volume of images and fantasies which assault the senses. There is also the technical complexity and the specialized division of labour ensuing therefrom, so that no single set of skills - manual, intellectual, or artistic - is adequate to cope with the needs of unity, integration, and openness to change. In a technically complex world it becomes nearly impossible to answer such simple questions as, 'what is a good life', and the relation between goods and the good. A third feature of modern life, the web of interdependence, transforms local happenings into global events and causes international conflicts to impinge on local destinies. Finally, and most dramatic, there is the ever-shortening time lag between changes proposed to human communities and the deadline they face for reacting to them in ways which protect their integrity. Mass media, modern medicine, and technology constantly affect the consciousness, values, and destinies of people, leaving them scant time to take counsel with their traditions or their images of the future so as to shape a wise response.

Because the crises of modern existence - threatened ecosystems and planetary systems, and inequalities of wealth- occur on a global scale and because they present a threat to the life chances of future generations, current ethical arrangements are not up to addressing these issues, simply because humanity has not had to confront these issues previously. Certainly mainstream economic theory has no ethical capacity in this regard. Indeed, the ethical content of even the welfare strand of mainstream economics has been described as "rather modest" (Sen, 1987, 35).

3.3.2: Responsibility, Knowledge, and Power

In the context of ethical novelty, it would be useful to examine why responsibility was not important in earlier ethical theory, for this will serve to highlight the links between knowledge and power and responsibility. Firstly, the conditions of human existence did not require an ethical stance toward the nonhuman world. Horizons of time and space were confined; ethical concern was with the present and with actions directed towards contemporaries. The setting for any sphere of action was immediate, as were the consequences and accountability for one's actions. Secondly, the degree of *knowledge* appropriate to such a limited sphere of action was therefore also limited. No need for experts here. Earlier societies had neither the technological means (power) nor the knowledge to effect significant ecological disturbance. Because ethical concern was with the present, no one could be held responsible for any long-term or unintended consequences (p.6).

But the relationship between power and knowledge and the ethical significance of responsibility has changed:

> Modern technology has introduced actions of such novel scale, objects and consequences that the framework of former ethics can no longer contain them. ... To be sure, the old prescriptions of the "neighbour" ethics - of justice, charity, honesty, and so on - still hold in their intimate immediacy for the nearest, day-to-day sphere of human interaction. But this sphere is overshadowed by a growing realm of collective action where doer, deed, and effect are no longer the same as they were in the proximate sphere, and which by the enormity of its powers forces upon ethics a new dimension of responsibility never dreamed of before (p.6).

This new dimension of responsibility encompasses a radical new set of moral problems. In the first place, humanity's technological prowess and enormous capacity for ecological modification has enlarged the sphere of responsibility from one's immediate neighbours and environment to the whole planet: "The containment of nearness and contemporaneity is gone, swept away by the spatial spread and time span of the cause-effect trains, which technological practice sets afoot even when taken for proximate ends" (p.7). Traditional ethics dealt with noncumulative behaviour, but cumulative effects have become the essence of modern technology. The result is that "the situation for later subjects and their choices of action will be progressively different from that of the initial agent and ever more the fated product of what was done before" (p.7). Add to this foreclosure of possibilities the

irreversibility of technologically-induced actions and what results is a situation where no individual could possibly undertake any action in the fullness of knowledge and know with certainty that their actions were morally responsible.

Secondly, the potentialities of the scale of human action demand a commensurate level of knowledge which is not really achievable. In other words, "the predictive knowledge falls behind the technical knowledge that nourishes our power to act [and this fact in] itself assumes ethical significance. The gap between the ability to foretell and the power to act creates a novel moral problem. ... [R]ecognition of ignorance becomes the obverse of the duty to know and thus part of the ethics that must govern the evermore necessary self-policing of our out-sized might" (p.7-8).

3.3.3: A Future-oriented Ethic

Humanity's "novel powers and range of prescience" thus entail a correspondingly new set of ethical imperatives, which transcend the anthropocentric and contemporaneous focus of previous ethical systems. Because technology has become an end in itself, because it has assumed a dominant place in human purpose, it also attaches to itself an ethical significance not required of it in previous times. The ethical import manifests both at the personal and collective levels, there being a direct connection between individual behaviour and technological success. Although technology and science have become the primary shapers of the human condition, it can be argued that this mode of progress does not in fact lead to moral betterment. Technological progress is a self-reinforcing process, for the success of technology's products in the competitive market-place is the spur to further innovation. The old adage: "Nothing succeeds like success" is most applicable here. However, the positive feed-back effects of development processes not only compound the accumulating effects of technology mentioned above, they also serve to reinforce the utilitarian, making/doing, self-interested, egoistic aspects of the human character at the expense of the ethical, altruistic, transpersonal self:

> ... the expanding artificial environment continuously reinforces the powers in man that created it, by compelling their unceasing inventive employment in its management and further advance, and by rewarding them with additional success - which only adds to the relentless claim. This positive feedback of functional necessity and

> reward assures the growing ascendancy of one side of man's nature over all others, and inevitably at their expense (p.9) [40].

At a time when the activation and exertion of the higher self has never been more needed, "the preponderant vulgarism of the technological blessings alone renders this more than unlikely" (p.169) and leads to a poverty, not of material wellbeing, but of the higher self. The accumulating effects of technological success demand a rethink of what is a good human life. John O'Neill (1993) makes recourse to the Aristotelian account of a flourishing human life and reinterprets it in the light of these changed circumstances. The Aristotelian account embraces a much broader view of human wellbeing or the 'good life' than the satisfaction of individual preferences. Indeed, the goods of an individual human life are to be had in developing the individual's characteristically human capacities. The market ethic presupposes a particular conception of human wellbeing - a narrow, want-regarding one - which is "institutionally fostered by the market itself, [indeed] the environmental problems engendered by the market stem in part from the forms of self-understanding it develops" (O'Neill, 1993, 3) The culture of self-interest, predicated as it is on material wellbeing, is delusory and stunting to the development of human capacities and blinds the modern individual to another more satisfying, more fulfilling kind of richness in human existence.

The poverty of the ethic of self-interest lies in its promotion of a very narrow view of the good life and the goods that it involves (O'Neill, 1993, 24-25). Under market imperatives, the moral requirement to develop one's capacities, to live the ethical life to the best of one's ability, is submerged by that very limited self-understanding fostered by the market (that is, wellbeing through consumption). At a time when the crises that confront late twentieth century societies require of individuals the application of their full human capacities, we are ill-equipped both in

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[40]See also Lutz and Lux (1988, 17) for their delineation of some characteristics of the *dual-self model* of the human character.

Higher self	Lower self
Growth needs	Deficiency needs
Self-actualization	Ego-aggrandizement
Truth seeking	Self-interest seeking
Reasonable	Rational*
Principled behaviour	Instrumental behaviour
Altruism and love	Selfishness
Objective	Subjective
Transpersonal	Personal (individual)

*Economic rationality

our individual and our collective capacity to tackle the enormity of social and environmental problems.

Further, in the light of the fact that the future of existence has become problematic, the Aristotelian understanding of a 'flourishing human life' takes on a much broader meaning. The flourishing of human life is not only dependent on the development of human capacities, it is also dependent on promoting the flourishing of other "individual living things and biological collectives as an end in itself, simply because the flourishing of nonhuman nature is constitutive of human flourishing. ...The best human life is one that includes an awareness of and practical concern with the goods and entities in the nonhuman world" (O'Neill, 1993, 24). This claim can be justified on the basis that a good human life entails a "breadth of goods".

It is becoming clear that the unvarying questions of human existence can no longer be suppressed or ignored, that material abundance does not guarantee general happiness (we seem unable to come to grips with the problems of youth alienation and suicide for example), that progress does not serve the ends of justice and equality within and between nations (we are unable to address problems of increasing gaps in the distribution of wealth, globally or nationally, nor injustice to minorities), that technology as an end in itself serves not to ensure social progress or moral betterment, and the subjugation of nature to humankind's ends serves not the cause of individual freedom but enslavement through physical and psychological collective compulsion (p.169).

The implications of such an expanded view of the good life for the social, political and economic institutions of modern societies are quite profound and will be addressed in subsequent chapters. It is sufficient to say that public policy must provide for the inclusion of the moral relevance of the future at a more profound level than the level of rhetoric, while it is encumbent on societies to design the kinds of institutional arrangements which will encourage the cultivation of those submerged aspects of human capability and human flourishing, for they, like the future, now assume renewed ethical significance.

I have alluded to the contemporaneity of responsibility under previous ethical regimes, contrasting it with the conditions of uncertainty concerning the fate of future generations, both human and nonhuman, which characterize modern existence. The role of technology in the creation of that uncertainty means that there is needed an "ethics of long-range responsibility, coextensive with the range of our power" (p.21-

22). Jonas argues that because our capacity for wisdom, which we need to exercise now more than at any other time, has been dulled by our technological and productive successes, and because we exist in ignorance of their ultimate implications, then the next best course is "responsible restraint". Responsible restraint is akin to *humility*, "a humility owed, not like the former humility to the smallness of our power, but to the excessive magnitude of it, which is the excess of our power to act over our power to foresee and our power to evaluate and to judge" (p.22). As well as the ethical value of humility, a future-oriented ethic of responsibility would also demand *foresight*, and appropriate policy instruments to ensure its inclusion in decision-making.

The situation of future uncertainty together with the irreversibility of technology's products which now confronts modern societies, develops from modern technology's tendency to compress the many small, "playing safe" steps of evolution into a few big ones. Natural evolution, because it works with small things in many steps, can afford a few small mistakes. Modern technology does not have this luxury.

> To the causal extent is thus added the causal tempo of technological interference with life's systems [and thus are injected] new elements of insecurity and hazard ... and in forcing this time contraction on evolutionary change he [technical man], by the same token, forces a vastly lengthened radius on his own actions (p.31).

The ethical imperative that arises from the uncertainty generated by the magnitude of humanity's technological capacity in combination with its future-determining ability is the command of *caution*. "[T]he prophesy of doom is to be given greater heed than the prophesy of bliss" (p.31). The duty of caution is further extended by the tendency of technologically-induced developments to adopt a runaway mode, to overtake themselves, leaving no opportunity or time for self-correction.

3.3.4: Obligations and Duties

This future-oriented ethic of responsibility, with its imperatives of humility, foresight and caution, is grounded in a reverence or respect for life and the duty to ensure the continuance and the quality of life. Just as the novel conditions of human existence demand a new ethical stance, so a new set of obligations and duties flows from these imperatives, for the traditional ground of moral behaviour in rights and duties is no longer sufficient. In traditional ethics, responsibility is the reciprocal duty of another's right, but in a future-oriented ethic, that which does not yet exist has

no claim or right to be respected. But if as argued, it is the future not-yet-existent to which we owe responsibility, then any ethic of responsibility to future generations "must be independent of any idea of a right and therefore also of a reciprocity" (p.39).

Jonas proposes an ethic of futurity founded on two principles, the second flowing from the first. The first is in fact metaphysical - to ensure the *existence* of future life - and the second is ethical - that the assurance of future life being given, we have a duty to ensure the *quality* of that future life. "*Our* cardinal duty toward the future of humanity ... is to stand guard over this onerous endowment of theirs" (p.42).

3.3.5: Ontology and Ethics: From Being to Becoming to Being-in-the-World

The future-oriented ethic of responsibility is an ethic for an era of crisis and emergency. It is an ethic oriented towards ensuring the future of existence. The ontology of premodern societies was grounded in the external - the objective of life being the attainment of personal perfection in this life to position oneself for a favoured place in eternal life. The impulse of existence was towards simply *being,* and stability and immutability were the states to be striven for. The ontology of modern life changed all that - the temporal component shifted from the hereafter to the present; change itself became the essence of social and moral progress and perfection became the object of change. *Becoming* became the ethical quest. But it was a flawed objective; it was a 'becoming' restricted to the level of the individual and it was a question of the individual becoming through 'having' (Fromm, 1978).

Now the ecological and social crises generated by the 'having' mode demand a new ontology of being in the world. The temporal component again swings to the future, but it is a future that is uncertain and cannot be defined in the certain knowledge of an eternity:

> "[T]he ontology has changed. Ours is not that of eternity but of time. No longer is immutability the measure of perfection; almost the opposite is true. Abandoned to 'sovereign becoming' (Nietzsche), condemned to it after abrogating transcendent being, we must seek the essential in transcience itself. It is in this context that responsibility can become dominant in morality" (p.125).

With eternity transcended, all we have is our own mortality and we alone are responsible for it, while the magnitude of our power over it thus makes our responsibility that much greater. The ontological foundations of the ethic of responsibility are not rooted in the pursuit of individual spiritual perfection or in

perfection through material accumulation. The essence of *being-in-the-world* is conceived as an emergent process of participation by the individual in the world's becoming. The ontological framework shifts from the individual entity to the *individual-in-relationship*. Individual wellbeing becomes explicitly rather than implicitly connected to collective wellbeing and moral conduct becomes a function of one's relationships.

3.3.6: Summary

The conditions of modern existence and the crises they generate demand an ethic that fits those conditions. Earlier ethical systems were appropriate to the immediacy and contemporaneity of concurrent human relationships, but they no longer fit conditions of dynamism and the capacity of human power and prescience to effect widespread ecological modification. The power and prescience of human activity creates conditions of uncertainty, the consequence of unknown and long-range side-effects, which earlier ethics, grounded in the stability and immutability of nature, are unfitted to address. A suitable ethic has to be future-oriented and capable of being applied to the magnitude and scale of technology's effects, their cumulative and self-reinforcing character, and their tendency to compress evolutionary processes. The moral obligations which flow from such an ethic involve both caution and foresight, and the establishment of institutions and mechanisms which encourage those virtues.

The implications for the practice of politics, for economic theory and for public policy are far-reaching. The ethic of responsibility is associated with two fundamental shifts in human organization and orientation. Firstly, the sphere of action switches from the individual to the collective. The scale and the nature of the crises confronting societies of the late twentieth century can only be addressed at the collective level, although, as I shall argue in the following chapter, individual responsibility remains important. Secondly, "the relevant horizon of responsibility" moves from the immediate context of action to the indefinite future (p.9). The need for collective action on technologically-induced environmental problems means that systems of economic activity largely predicated on the supremacy of individual self-interest and largely existing as ends in themselves must once again be justified according to political and social values. As well, the objectives of economic activity must once again be determined in the political sphere; in other words, the return of the normative dimension to decision-making in the spheres of production and

consumption. Economic theory no longer has the luxury of remaining ethically neutral.

As for the political sphere, an ethic that acknowledges the demands of future existence is a challenge to the capacity of liberal representative democracies to take future interests into account. Under current arrangements, only the interests of present generations can be adequately represented. Who then will represent the interests of future generations? How will we in the present take account of the interests of the future? Who will be accountable to them for our mistakes? There are of course no concrete answers to these questions. All that we can provide for is that the possibilities of future generations will not be foreclosed. In this respect the magnitude and causal extent of modern actions and their capacity for novelty and surprise demands a politics normatively grounded in farsightedness, while an acknowledgement of the inherent dynamism of modern systems and the gap between human knowledge and technological capability requires that spontaneity be accepted and institutionalized as a crucial element of the political process (p.118-119).

Further, those philosophical questions of old reassert themselves and demand a wisdom of the body politic that is not to be found in the doctrines of self-interest, nor in the parallel ethic of progress through economic growth. They call for a reconciliation between the interests of the individual and the collective. That will be the task of ethical-moral thought, to provide a normative dimension for ecologically sound productive activity. We could do worse than return to Adam Smith for a reinterpretation of the ethical dimensions of economic theory. As mentioned earlier in this chapter, Smith confined the importance of self-interest to certain transactions where trade or production was hindered by bureaucratic or other obstacles. The burden for the extrapolation of his observations on some self-interested behaviour in specific situations of exchange and the division of labour to cover all aspects of human behaviour must really be laid on subsequent classical and neoclassical economists and on the commercial practitioners of the day. It was prudence, the combination of the two qualities of reason and understanding with 'self-command', which Smith saw as the virtue most useful to the individual. Indeed, the essence of good behaviour lay in man regarding himself:

> "not as something separated and detached, but as a citizen of the world, a member of the vast commonwealth of nature, ... [and] to the interests of this great community, he ought at all times to be willing that his own little interest should be sacrificed" (Smith, 1976[1759], 140).

The public-spirited individual should exhibit 'humanity, justice, generosity, and public spirit' as the virtues most useful to others[41].

I have argued that the objective of an economic system grounded in an ethic of responsibility and its associated virtues is the survival and sustainability of the planet's biophysical and cultural systems. Sustainable development has been proposed as an economic strategy which would achieve this goal as well as serving the needs of social justice. To satisfy these ends, sustainable development must also be ethically sound. It is this question which the next section will address.

3.4: Sustainable Development: Rhetoric Or Ethical Ideal?

> If sustainable development is to succeed as a new way of life on Earth, its moral content must be thoroughly debated and understood (Engel, 1990, 2).

The purpose of this section is to assess the ethical capacity of the concept of sustainable development, as a strategy for integrating economy and ecology, to fulfill the task of ensuring ecological integrity and social justice. With reference to the now formulated ethic of responsibility, does sustainable development embody the ethical principles of caution, humility and foresight? Will sustainable development constitute the ethical values framework required to guide individual and collective behaviour towards what is considered good and right in this era of human and environmental crisis? And further, does it articulate an ethically sound understanding of what is a good life? In this respect, does it reconcile the age-old question of human autonomy and the demands of the common good?

These are the questions which will occupy my attention in the remaining discussion, but first there are salient points which are germane to the argument and I shall address these at this juncture. They concern the normative dimension of sustainable development.

1. Sustainable development is both means and end in itself (Goulet, 1990, 34).
2. It is an inherently contested concept, like other political terms, such as democracy, liberty or social justice (Jacobs, 1995a, 4).
3. It implies a time perspective.

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[41]See Sen (1987, 22ff.) for a discussion of Smith's actual treatment of self-interest. He points out that Smith in reality criticised the tendency of some philosophers, such as Epicurus, to reduce the whole discourse of life to a single principle.

In all these senses the concept involves a normative dimension. In the first instance, sustainable development designates the goal of a set of economic processes which are themselves the means to the objective of sustainability (Goulet, 1990, 39). It is both new morality and new economic strategy (Engel, 1990, 1). As discussed earlier, the conditions of modern existence resurrect existential considerations largely ignored since the beginning of the modern industrial era. Sustainable development, Engel (1990, 1) argues, "is but the latest attempt to answer the perennial question of the purpose of human activity on the face of the Earth-the elemental moral question of what way of life human beings ought to pursue". The question of how we should live was recognized by Weber to be an inherently political concern. For Weber, it was the question which distinguished politics from science and therefore one that could not be resolved through applications of science and technology.

Whether sustainable development is conceived as mere rhetoric, a cloak for business as usual (*The Ecologist*, 1993; Kothari, 1990, 27), or as an ethic which forms the basis for restructuring human productive activity and its relationship to ecological integrity, involves its contestability as a political subject (Jacobs, 1995a, 4-5). Jacobs (1995a, 1) maintains that, now that the objective of sustainability has been generally accepted by radical greens, technocrats and capitalists alike, the contestation revolves around how it should be interpreted and implemented in practice. This "contestation constitutes the political struggle over the direction of social and economic development" (Jacobs, 1995a, 5). In this sense, sustainable development is normative in that it can set the parameters, discursively decided upon, which will determine to what extent we can restructure our systems of activity to meet the needs of both human and nonhuman nature.

Sustainable development is also normative in that it implies a time perspective. "A sustainable environmental strategy implies a time perspective that is careless of neither future interests nor past experience" (Perrings, 1987, 160). If one accords any degree of intertemporal equity, as the now accepted interpretation purports to do, then one is making a moral judgement, in the sense that when making decisions which impact upon the welfare of future generations, one must weigh up the good of the present generations against the good of the former. The issue is "what responsibility the collectivity of the moment feels for the wellbeing of those who follow" (Perrings, 1987, 118). The rate at which the future is discounted, the choice of a positive or nil social discount rate, is dependent upon the extent to which current generations feel that the future can look after itself or accept responsibility for

the wellbeing of those to come. A positive discount rate implies that present generations accept little or no responsibility for the future's "impoverishment" or for their own "profligacy". Conversely, where there is no future discounting, the implication is that the present accepts responsibility for the future, but also that the outcomes of economic activity "are only optimal if they yield a constant stream of income in all periods. ...[T]he choice of a social discount rate involves matters of ethics and judgement and ...different ethics will result in the choice of different programs of production" (Perrings, 1987, 118-119). What is certain is that the self-regulating market and its price system is incapable of recording these time-dependent effects (Perrings, 1987, 111), for as John Passmore (1974, 85) noted, "the market places great emphasis on certainty and propinquity, both of which qualities are irrelevant under the circumstances that now confront humankind".

3.4.1: Sustainable Development: Interpretations

As a further prelude to assessing the ethical capacity of sustainable development, we need to establish just what is meant by the term, and if, as Jacobs (1995a) maintains, it is a contested subject, what this means for an ethic of futurity. Jacobs has delineated 'radical' and 'conservative' interpretations which constitute competing conceptions about either pole of a continuum of interpretations. He recognizes in the sustainable development discourse four 'faultlines' about which contestation occcurs. These include the *degree of environmental protection* required by the concept, the *degree of intergenerational equity*, the approach to *participation*, and the *breadth of the subject area*. The 'weak' version adopts the position that the benefits of environmental protection have to be balanced or traded off against those of economic growth, that is, *environmental conservation*, while the 'strong' version holds that economic activity is subject to environmental limits. The latter is based on the notions of 'carrying capacity' and 'maximum sustainable yield', which find their expression in the general understanding that society should live within its limits. The notion of equity, which involves a commitment to ensure the basic needs of those living now and in the future (intra- and intertemporal equity), plays a large part in the discourse about sustainability in the 'developing' South, but is very largely ignored in the wealthier 'developed' North. The discourse in the South adopts an egalitarian stance concerning the distribution of global resources, a position which is less attractive in the industrialized North because of the fundamental challenge to levels of production and consumption and patterns of global economic relations. The redistribution of global resources implied by the egalitarian interpretation means that

Fault Lines of Contestation	**Conservative Sustainable Development**	**Radical Sustainable Development**
Degree of Environmental Protection	'Weak' Trade-off between economic growth and environmental protection	'Strong' Accords priority natural values
Equity (intra- and intergeneratio nal)	Nonegalitarian Limited global redistribution	Egalitarian Recognizes global maldistribution of wealth and responsibilities to future generations
Participation	'Top-down' Participation is limited to the implementation stage Of instrumental value only	'Bottom-up' Directed to both objective-setting and policy-implementation Of intrinsic value
Breadth of Subject Area	Narrow interpretation Restricted to the maintenance of the resource base	Broad interpretation Includes both the maintenance of environmental integrity and sound human development-'quality of life'issues

Figure 1: Sustainable Development: Alternative Interpretations (from Jacobs (1995a, 9-15)

Northern countries are open to the charge of confining their interpretation of sustainable development to an 'environmental' one and ignoring its 'developmental' implications; thus demonstrating little commitment to the equity provisions inherent in the concept.

Concerning the intergenerational equity provision, the constraints of the growth paradigm and of liberal representative democracy mean that governments are restricted to looking after the welfare of present generations. It is easier for most liberal democratic governments to give the appearance of attending to equity concerns by such manoeuvres as the designation of wilderness areas, rather than acknowledging this limitation and addressing the fundamental contradictions of the growthist paradigm.

The 'top-down' version of *participation* is that favoured by governments because they can retain control of the sustainable development agenda. This strategy is furthered by limiting participation to major stake-holders, including business, local government, and interest groups and other non-government organizations. It is also technocratic in that objectives are set by governments using experts, participation being limited to the implementation stage of policy formation. Thus issues such as waste reduction, recycling and energy conservation are more amenable to the reform strategies available to governments. By contrast, the 'bottom-up' approach involves public participation in both objective-setting and implementation. In the former approach participation has extrinsic value; it is a means to implementing sustainable development. In the latter, participation has intrinsic value; it is a good in itself.

The interpretation of the *subject area* covered by the concept varies from environmental protection as the dominant motivation to a much broader set of concerns including health, education and social welfare. This broader understanding flows from the notion that environmental protection is not possible without sound human development (Goulet, 1990), a development which is not synonymous with income growth. The expansion of the 'quality of life' criteria of sustainable development to include not just environmental quality but also basic human needs for meaningful work, equal opportunity and access to education and information, participation, protection of local and indigenous culture, human-scale development and so on has enormous implications for all areas of human activity: "[S]ustainable development is not just an environmental concept, but a general one, describing a new goal of economic and social (and by implication, political) life" (Jacobs, 1995a, 14).

The radical conception of sustainable development tends to be held by many greens, environmental activists, and by some public sector bureaucrats, particularly at the level of local government, while the conservative view tends to be the preserve of governments and business. In the light of the argument so far, the conservative view would appear to be the ethically weaker, because it clings to the modernist view of progress with its assumptions of scientism, technocratic managerialism, etatism, and economic growth. It is the ethical strength of sustainable development that I now consider.

3.4.2: Sustainable Development and Ethics

The ethic of responsibility articulated above is a future-oriented ethic which calls for values of caution, humility and foresight in the human-nature production interface. Futurity is one of the core ideas identified by Jacobs (1991; 1995a) in the sustainable development discourse. The question is: what does such an ethic demand of present generations with respect to the future? And what do these values mean for the operationalizing of sustainable development? The uncertainties and risks[42] generated by modern humanity's immense technological power and prescience demand in the minimal case at least the minimization of "unsustainable outcomes" (Baines and Peet, 1992, 82) or "the avoidance of environmental catastrophe" (Jacobs, 1991, 72). Under this interpretation there is no positive responsibility for what kind of future (that is, quality of life) current generations should bequeath their descendants. The ethical requirement is confined to risk avoidance. The maximal case, by contrast, demands somewhat more: "that future generations are left the opportunity to experience a level of environmental consumption at least equal to that of the present generation" (Jacobs, 1991, 72). The implications for the current generation's treatment of the claims of generations to come are different for each case. The weak case might allow considerable environmental degradation whereas the demand to pass on at least "the *same* degree of environmental capacity" in the strong case may mean that not only is environmental capacity held constant but even lower levels of degradation than now obtain may be required (Jacobs, 1991, 73). Thus a *cautious* environmental policy is one that, at the very least, maintains environmental capacities, if not improving them.[43]

The ethical value of *foresight*, defined as 'caring for the future', is linked to the degree of certainty, that is, the degree to which future effects originating in present actions can be known. Perrings (1987, 116-117) had this to say about time-dependent effects and their relationship to foresight:

> The assumption of certainty applies to the *environmental short period*, the period in which there is no environmental change associated with a particular action. The assumption of uncertainty is equivalent to the assumption that we are interested in the *environmental long period*, during which the process of environmental change has generated at least some external effects.

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[42]Perrings (1987, 112), drawing on Shackle and Georgescu-Roegen, has characterized 'risks' as a function of a situation where the range of possible outcomes is known in advance, while 'uncertainty' is a function of 'novelty' or 'surprise', that is, when the range of possible outcomes cannot be known in advance.

[43]See also Pearce (1993, 51-53) on the measurement of 'weak' and 'strong' sustainability.

> The environmental short period may be thought of as the period in which it is legitimate to assume perfect foresight. The environmental long period is any period in which the assumption of perfect foresight does not hold.

Under conditions of runaway technology and rapid environmental change, the imperfect foresight case must be conceded.

The economic instrument used to anticipate the effects of current investment decisions in the future is the discount rate, which is a measure of the preferences for income earned in one period relative to income earned in the next. "A low discount rate (which implies that income generated in the future generates a high rate relative to the present) admits a greater degree of uncertainty in a given program than a high discount (which implies a low weight on future incomes)" (Perrings, 1987, 117). In trading off the interests of future generations and nature with the demands of economic growth, the 'conservative' version of sustainable development would favour positive discount rates and would rely on the market for relevant signals. But market prices can only reflect the economic situation as it currently is, not as it will be.[44] The 'radical' version would support a nil or negative discount rate. In fact, environmentalists who recognize the intrinsicality of nature and the entitlements of future generations would find social discounting ethically unjustifiable. Daly and Cobb (1989, Ch.7) would say that it was a case of 'misplaced concreteness' to confuse the value of money with the value of environmental goods.

On questions of equity and discount rates, Norgaard and Howarth (1991, 94) are particularly critical of neoclassicists' treatment of equity matters as simply a question of applying the appropriate rate of discount on the assumption that the needs of future generations can be "treated as investment decisions yielding returns to this generation". This incidental way of thinking about future needs has to be replaced by more systematic measures:

> Questions which are fundamentally matters of equity should be treated as such. If we are concerned about the distribution of welfare across generations, then we should transfer wealth, not engage in inefficient investments. Transfer mechanisms might include setting aside natural resources and protecting environments, educating the young, and developing technologies for the sustainable management of renewable resources. Some of these might be viewed as worthwhile investments on the part of this

[44]Beder (1993, 82) cites the view of the Business Council of Australia that "uncertainty about the impacts of a development on biological diversity is not a reason for stopping a development".

> generation, but if their intention is to function as transfers, then they should not be evaluated as investments. The benefits from transfers, in short, should not be discounted (Norgaard and Howarth, 1991, 98).

The problem with wealth transfers to future generations, however, is that we have no way of knowing their preferences. Imperfect foresight notwithstanding, it is certain that we should do better than plan for their mere survival. We can at least make provision for future societies to realize and enjoy all those social ideals which we now hold (Passmore, 1974, 91).

Moreover, with respect to sustainability, the strong case would see value in collective participation for the setting of anticipatory limits which acknowledge the uncertainties and surprise of long period effects and are based on ecological and ethical insights (Daly and Cobb, 1989, 152).[45] Norgaard and Howarth (1991, 98) similarly conclude that it would be more preferable for decision-making about wealth transfers to future generations to be entrusted to "politically functional societies" rather than that environmental constraints be bureaucratically imposed.

The moral significance of humility for the sustainable development discourse lies in its implications for the role of science and technology. Science can no longer rest on the illusion that its function is to develop nature in the service of humanity. It can no longer conflate value-freedom with ethical freedom:

> This must give place to the original purpose of science, namely, seeking to understand the mysteries of nature with a deep sense of humility and wonder. True science is practised by persons with a fundamental philosophical scepticism about the scope and limits of human knowledge, who never for a moment assume that all is knowable and that secular knowledge provides the key to 'mastering' the universe. ... The scientist will have to take a more *modest* role as a participant in a total system of relationships [my italics] (Kothari, 1990, 34-35; see also O'Neill, 1993, 156-158).

Sustainable development is still fundamentally a modernist programme in the sense that it has not yet accepted that there are limits to human knowledge and understanding and it retains the control myths of earlier modernity, that is, that human society is capable of controlling and managing the world. "The ends are

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[45]On the possibilities for setting limits based on current knowledge, see Dietz and van der Straaten (1993, 131, 15).

different-to live within environmental limits, not to expand as if there weren't any-but the means are the same" (Jacobs, 1995b, 8).

The notion that carrying capacity, which is a critical element in the sustainability discourse, can be objectively determined, has been criticized by some sociologists of science, who argue that scientific knowledge cannot be constructed independently of its social and cultural milieu and that different cultures may furnish different understandings and ways of knowing (Redclift, 1984). Jacobs (1995b, 5) demonstrates that even so-called objectively determined limits are often arbitrary and involve some degree of political negotiation, concluding that "there are no objectively 'scientific' ways of resolving these questions; while different understandings of nature can inform them, they must ultimately be arbitrated with reference to 'subjective' socially constructed values. ... [The] simple scientistic notion of these concepts [carrying capacity and environmental limits] must be discarded and replaced with a more conditional, socially-informed one" (Jacobs, 1995b, 5).

Some environmentalists would argue that it is the hubris of modern technology and managerial techniques which have brought the planet to the brink of environmental disaster, and that humankind should relinquish control of large areas of the nonhuman world. This would involve immense reductions in population numbers, in production, and in standards of material wealth. It is doubtful whether such a transformation is achievable, certainly not in the short-term. It is clear that choices have to be made and some form of environmental management appears unavoidable. Science and technology will still be required to play a role in both the choices and the implementation, for the latter will need to be informed by an adequate and reliable science and an understanding of the interactions between humankind and nature. Decisions will need to be taken in the clear understanding of the fallibilities of scientific knowledge and in the realization that technologies can produce unforeseen side-effects.

Under these circumstances, what is required is "scientific humility: acceptance of the fact that the biosphere is more complex than we thought and human understanding of it more limited" (Jacobs, 1995b, 9). Along with theorists such as John O'Neill (1993, 147), we can acknowledge the shortcomings of objectivist science and its inadequacy in rational environmental policy, but accept that science is still a reliable way of knowing. It must be seen as a tool that requires the guidance of ethical principles and political judgements in its application to

environmental problems under the prevailing conditions of uncertainty. Environmental policy guided by the values of humility and caution would ensure that applications of technology avoid any major changes to ecological processes as well as avoiding the implementation of any projects which have the potential for inducing environmentally irreversible consequences.

It is obvious that humankind's enormous capacity to influence the future is such that we cannot withdraw from making decisions about the future. The conservative model of sustainable development would see the continuation of economic growth within ecological limits, with little change to the kind of science and technology employed or the economic institutional framework underpinning it - in other words, 'business as usual' (Kothari, 1990; *The Ecologist*, 1993). The openness of the radical version to bottom-up participation in processes of social and political choice allows for the possibility of the replacement of hubristic scientism and top-down managerialism. Participation processes open up opportunities for the inclusion of local knowledge as a complement to expert scientific knowledge. In theory, this should make for ecologically sound decision-making, but this is not guaranteed (Saward, 1993).

In this respect, Jacobs (1995b, 6) sees a further advantage in participative processes in that they can constitute a method for the formation of knowledge about the world and therefore of deciding on the kinds of environmental limits that apply and where they lie. Under circumstances where the validity of other ways of knowing or local knowledge is accepted, and where judgements on scientific knowledge are made with the recognition of the downside of objectivist science and with the guidance of the ethical principle of humility, then we should expect relatively benign environmental and social outcomes. In this regard, the radical position can be said to have more potential humility towards the capacity of objectively determined knowledge to deal with environmental problems and that environmental management on this basis would operate in full acknowledgement that it can only command a partial understanding of the workings of the natural world and human impacts on it.

In summary then, the radical version of sustainable development is in an ethically stronger position to conform to those values of caution, humility and foresight articulated above. Its stance on the maintenance of environmental capacity would demand environmental policy based on caution, while its disdain for social discounting, a disdain founded on a recognition of the prior value of other nature and

the entitlements of future generations, would imply the use of mechanisms other than competitive markets for relevant signals about future needs. Such mechanisms for caring for the needs of future generations (foresight) would acknowledge the imperfections of human knowledge organizations. Modesty concerning the limits of secular knowledge (humility) involves accepting that, under conditions of uncertainty, science requires the guidance of ethical principles and political judgements. Setting limits to the extent of human activity has to be achieved through participative processes which recognize the complementarity of local and expert knowledge systems. For this to occur, some overarching framework or generally accepted consensus of what constitutes the good life has to be negotiated. Indeed the emphasis is on negotiation, for there will always be some disagreement on what constitutes a good life t hough this is not to say that there cannot be some generally agreed upon understanding of a good human life and the common good which permits that flourishing.[46]

3.4.3: Sustainable Development, Ethics and the Good Life

Those basic existential questions long repressed by the doctrine of economic progress: How shall I live? What kind of life should I live? and What is a good life for me to lead?, as I have earlier argued, once again claim our attention in an era of unprecedented ecological hazards and uncertainty. As this is also an era of high social reflexivity, Giddens (1994, 226) argues that how an individual constructs him- or herself is directly related to these larger questions of social and environmental renewal:

> 'How shall we live?': that question can no longer be answered in terms of the control of external risk, or left to the remaining elements of tradition. Facing up to it means deliberating, in an open and public way, how social and environmental repair might be connected to the pursuit of positive life values (Giddens, 1994, 226).

As a strategy for human development, the relinquishing of productivism "implies a recovery of positive life values, guided by the themes of autonomy, solidarity and the

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[46]Spragens (1990, 115-123) argues for "an open-textured conception of the good", one which is attendant to historical existence, to human experience, with its capacities and fallibilities, and open to emendation in response to the change of circumstance. The pursuit of the common good should "function as an intelligible framework for solving the problems of our common life". It is not an end-point which can be postulated in advance and then enforced. "We seek to know and create our common good by solving the difficulties that afflict us" (p.120).

pursuit of happiness ... [and] an attitude of respect towards nonhuman agencies and beings, present and future" (Giddens, 1994, 227-228, 253).

The resurrection of positive life values - the sanctity of human life, the universal right to self-actualization and happiness, and respect for all nonhuman agencies and beings - and the associated understanding of the good citizen living the good life as a prerequisite for the common weal flies in the face of what has been the dominant consensus on the role of the liberal state for some centuries. This is the tradition rooted in Hobbes that the function of the state was merely to arbitrate between the self-serving desires of its citizens, for which only understanding was required of it, certainly not virtue. In the Hobbesian conception of the liberal state, the state was expected to maintain a strict neutrality between competing individual goods, simply supplying the legal and constitutional framework within which individuals could construct their own individual goods (Weale, 1992, 151). Adam Smith's invisible hand would see to it that these individual goods would add up to the common good.

The notion that the health of a society depends not only on the physical wellbeing of its citizens but also on their moral health has its roots in the classical democracy of Aristotle with later echoes in Rousseau, Jefferson, J. S. Mill and T. H. Green. But the problems that beset us now are not only those of relationships between citizens - we need to be good citizens also in relation to nature. A recent attempt to look at human/nature relationships in this sense has been that of John O'Neill (1993). The significance of O'Neill's interpretation of the Aristotelian understanding of a flourishing human life, that it is constituted by the flourishing of "the goods and entities of nonhuman life", is that it provides an alternative foundation for an ethically good life, a replacement for the ethically limited one inspired by the ideology of the self-regulating market (O'Neill, 1993, 24). Within the framework of such an understanding of the good life, again it is the radical interpretation of sustainability, with its recognition of the intrinsic values of other nature and that 'quality of life' issues are intimately connected to environmental protection, which has the capacity to encourage that flourishing which is constitutive of a good human life. Moreover, participation processes that encourage input into both policy formation and implementation are more likely to be directed at creating just those conditions. As O'Neill (1993, 42) concludes: "Success in our own lives needs to be clearly bound up with those of future generations". The problem of our obligations to those generations yet to come has social, political and economic dimensions linked to the relationship between the individual and the community. It

is a problem of "developing forms of community which no longer leave the individual stripped of particular ties to others, but which are compatible with the sense of individual autonomy and the richness of needs that the disintegration of older identities also produced" (O'Neill, 1993, 42-43).

3.4.4: Sustainable Development, Autonomy and the Common Good

The age old question of the reconciliation of individual autonomy with the wider social good is being asked anew in the context of sustainable development. It is Ronald Engel's contention that the question of the interdependence of human freedom and the freedom of nature must be faced and dealt with if sustainable development is to be the "ethic that recognizes and promotes the mutuality of ecological and social values in concrete living communities ...[and if it is] to serve as the basis for significant social change - if it is to help define specific, practical development goals and provide guidance in the inevitable conflicts that arise when social and ecological obligations are considered within the framework of action" (Engel, 1990, 19).

Over the last several centuries, the relationship of humanity to nature among certain world views has become unbalanced, taking the form of human domination over the natural world to which humans belong. "Nature and human liberty have come to be perceived as opposing poles in a dichotomy" (Goulet, 1990, 43). This oppositional stance has become paradoxical in that "human beings are not physically compelled to respect nature but they need to do so if they are to survive and preserve the existential ground on which to assert their freedom. Since this is so, there can be no ultimate or radical incompatibility between the demands of nature and the exigencies of human freedom" (Goulet, 1990, 43). Further Goulet (1990, 45) states: "[T]hings have gone wrong not because humans held an anthropocentric view of the universe (they could not do otherwise) but because they erred in defining the value content of their own development and freedom". They made the mistake of believing that freedom from the constraints of nature is an absolute value, when it really constitutes a negative view of freedom. Freedom from the constraints of nature is only a positive value in the sense that it allows freedom for human fulfillment or actualization or for what John Gray (1993) calls "the positive liberty of autonomy". The autonomy of which Gray speaks is clearly not the individualism of the self-seeking, profit-maximizing behaviour of the neoliberal market model. In its purest individualist form, it is that which he defines as:

> the condition in which persons can at least be part authors of their lives, in that they have before them a range of worthwhile options, in respect of which their choices are not fettered by coercion and with regard to which they possess the capacities and resources presupposed by a reasonable measure of success in their self-chosen paths among these options (Gray, 1993, 78).

The preconditions of autonomy in the late industrial age encompass a "broad diversity of institutions" and "a rich and deep common culture containing choiceworthy options and forms of life" (Gray, 1993, 82).

Both Gray (1993, 81) and Giddens (1994, 13) shy away from claiming that autonomy is a universal good, arguing rather that it is an essential element of the good life at this juncture in the history of those societies which espouse an individualist form of life:

> In a world of high reflexivity, an individual must achieve a certain degree of autonomy of action as a condition of being able to survive and form a life (Giddens, 1994, 13).

and :

> No inhabitant of a modern pluralistic, mobile and discursive society can fare well without at least a modicum of the capacities and resources needed for autonomy. Most modern societies are such, in other words, that the constitutive elements of autonomy - the capacity for rational deliberation and choice, the absence of coercion by others and the possession of the resources needed for a life that is at least partly self-directed - are among our most vital interests. They are, indeed, vital ingredients in our wellbeing as a whole (Gray, 1993, 81).

My own intuition suggests that autonomy conceived as the freedom to actualize one's evolutionary potential, whether an entity be human or nonhuman, may indeed be a universal good, and rather, that it is the conditions of autonomy that are historically situated and culturally specific. But that is not necessarily at issue here. Rather, the question is whether sustainable development as economic strategy can reconcile personal autonomy and the interdependence of all life forms. In other words: Can sustainable development constitute the basis for a "wider and more satisfactory conception of the goods of life" (O'Neill, 1993, 171)?

To return to autonomy and its implications. The question of reconciling individual autonomy with the common good is essentially about the relationship

between the individual and the collective. The breakdown of community ties and the parallel emergence of an egoistic individualism is much lamented in both academic literature and the popular press. Giddens (1994, 13) optimistically maintains that the disintegration of the conditions of individual and collective life provides opportunities for new forms of solidarity, while the autonomy essential to the good living of an individual in a highly reflexive society implies reciprocity and interdependence. Reciprocity is grounded in the obligations of the individual to other members of the collective and to the collective itself. These obligations are constituted by the need for individuals to interact with others as they "construct their own biographies". In interacting with others, they create new solidarities, which are founded on mutual obligation. This "is not only important because it implies a vertical connection with the needs of others; it matters because it refers to the sustaining of ties with others over time" (Giddens, 1994, 126-127). At the personal level, the sources of solidarity, that is, the trust mechanisms involved, depend on the recognition of personal integrity; at the level of abstract systems, the state and global relations, they involve the guidance of themes of visibility and responsibility (Giddens, 1994, 131).

The importance of sustaining ties over time and obligations to future generations has only really become a problem now that it has become obvious that the economic order that was set in place by the liberal revolution is the source of social and environmental disintegration. O'Neill (1993, 38-43) has clearly demonstrated the role of market economies in disrupting the sense of present generations' connection with both past and future. The requirements of the self-regulating market for the mobilization of both land and labour undermine that sense of continuity and community obligation to past and future generations. By severing ties of place, kin and occupation, the market undermines those institutions which link future harms or wellbeing to present actions. In highlighting "this temporal myopia of modern society", neither O'Neill (1993, 42) nor Giddens (1994, 126) advocate a return to traditional forms of community, both acknowledging the oppressiveness of some traditional communities. Rather, they advocate forms of community which foster individual ties and obligations, "that allow an extension of our sense of identity over time [and that are] ... compatible with the sense of individual autonomy" (O'Neill, 1993, 42, 43).

The key normative idea which expresses the notion of human autonomy and welfare being constituted by community wellbeing is that of the 'individual-in-community' (Engel, 1990, 15) or variously Daly and Cobb's idea of 'person-in-

community' (Daly and Cobb, 1989, Ch. 8) and Etzioni's 'I and We paradigm' of the responsive community (Etzioni, 1988; 1992). The ideal of 'person-in-community' in which the individual is constituted by his or her relationships is contrasted with that implicit in the market economy where the good of society is identical with the sum of the goods and services accruing to individual society members. This view says nothing about the quality of social relationships; indeed, there is no recognition that unlimited production can actually damage those constitutive social relationships: "Since relationships among human beings are not part of the model with which the theory begins, the damaging of these relationships is not signalled by the theory. The destruction of existing societies does not count against the success of policies designed to increase aggregate goods and services" (Daly and Cobb, 1989, 163).

The model of 'person-in-community' recognizes the needs of individual autonomy, which, as Daly and Cobb (1989) note, can be taken care of in large measure by market transactions, but that the wellbeing of social relationships constituting the community cannot be addressed by increases in output of commodities. Nor can they be exchanged in the market, though they can be damaged by it. Hence the need for "an economic order that supports the pattern of personal relationships that make up the community" (Daly and Cobb, 1989, 165). Moreover, as we have also extended the field of relationship and obligation to the nonhuman community, the economic order should support not only personal relationships but human/nature connections.

To answer those questions posed earlier concerning the capacity of sustainable development to provide for conditions of human autonomy and flourishing consistent with biosystemic sustainability and a broader conception of the goods of life, for Goulet (1990, 43-44) the values underpinning these questions - individual autonomy, social justice and nature preservation - must have equal moral standing:

> The reason is simply that any long-term, sustainable, equity-enhancing combat against poverty requires wisdom in the exploitation of resources, just as the preservation of species cannot be persuasively held out as a priority goal if the human species is threatened with degrading poverty or extinction (Goulet, 1990, 44).

Sound human development is consistent with ecological wisdom.

Concerning these values, we now have some idea of what is required of a sustainable system of production and consumption. Firstly, it must ensure sound human flourishing, by furnishing those goods which ensure human autonomy (survival, opportunities for participation, and a good life); secondly, it must preserve and foster forms of community wellbeing, which ensure connection with past and future time perspectives; and thirdly, it must preserve and foster ecosystem viability. Sound human development consistent with ecosystem viability is really only possible with the radical interpretation of sustainable development. This has been variously relabelled 'authentic development' (Goulet, 1990), ecodevelopment (Crocker, 1990), reverential development (Skolimowski, 1990) and alternative development (Giddens, 1994) in attempts to underline the essentially normative character of the concept and to distinguish it from the limited, instrumental, conservative view of environmental conservation and development.

These are the criteria which define sustainable development as an ethical ideal and which suggest that the transformations required of the economic sphere cannot be restricted to simple economic restructuring in order to contain economic growth within environmental limits. When sustainability is conceived as an ethical ideal, it raises profound questions about the profligacy of western life-styles and consumption patterns, and their role in the extreme poverty and ecological decline of much of the 'developing' world. The existence of humankind is no longer simply a matter of avoiding external risks. The sources of risk have changed. It is rather *manufactured risk,* which results from human intervention in social processes and in nature (Giddens, 1994, 4). As it has become obvious that the futures of humankind and the biosphere are intimately connected, so too has it become clear that only humans can be responsible for the future of existence:

> The exploitation of planet Earth has gone beyond the threshhold where nature can defend and replenish itself. The urgently needed symbiosis between nature and the human species can only result from placing human *responsibility* at the centre of the task of conserving nature [my italics] (Goulet, 1990, 45).

3.4.5: Summary

I have argued that if sustainable development is to prove both the source of moral action and the economic strategy which ensures ecological integrity and social justice, then it must be conceived as an ethical ideal with human responsibility as its moral core. In its radical version, sustainable development integrates a strong

normative dimension in that, firstly, it involves the setting of parameters for economic restructuring; secondly, it implies a time perspective and thus some degree of intertemporal equity; and thirdly, it sets down the objectives of economic activity.

The discourse of sustainability revolves around four poles of contestation, the two versions - radical and conservative - assuming opposing positions on the degree of environmental protection, on their approach to participation, on the extent of intra- and intergenerational equity and on the relevant spheres of action. I contend that the radical interpretation is the ethically stronger based on its acceptance of intrinsic values in nature, equity provisions, bottom-up participation and its recognition that sustainability implies attention to 'quality of life' issues and is not restricted solely to environmental conservation.

Assessment of sustainable development for its integration of the ethic of responsibility outlined earlier reveals that attention to the values of caution, foresight and humility demands at the very least the maintenance of existing environmental capacities, if not their restoration and enhancement. Moreover the practice of discounting the wellbeing of future generations for the benefit of those presently living is unjustifiable and unethical. Economic policies must be oriented to take the environmental long period into consideration. Similarly the hegemony and hubris of modern science and technology together with expert-based managerialism is antipathetic to the value of humility and the validity of non-scientific knowledges.

Further, sustainable development as ethical ideal challenges the view of the liberal state as neutral umpire between different conceptions of the good. In its ethically strong form it demands a conception of human flourishing that recognizes the intrinsic value of other nature, whose own flourishing is constitutive of a good human life.

The issue of human flourishing in the context of sustainable development raises the age-old question of the reconciliation of individual freedom or autonomy with the common good. In this context the question revolves around the interdependence of human freedom and the freedom of nature. For some centuries human freedom has been defined negatively in relation to nature, as freedom from nature, and as an absolute value no less. The continued existence of humankind can no longer countenance such a radical discontinuity between these values.

A flourishing human life which furnishes the conditions for autonomy in a highly reflexive society implies reciprocity and mutual obligation in relationships and new bases for solidarity. Since traditional forms of community and ties to past and future generations have been undermined by market mechanisms of labour and land mobilization, the fostering of new solidarities which encourage a sense of identity over time is a requirement of any sustainable economic strategy.

The notion that the wellbeing of a society is constituted by the wellbeing and virtue of its citizens is recognized in the concepts of person-community, which acknowledge the symbiotic balance between individual and community needs. A sustainable economic order would support the relationships of community by recognizing their significance for social and ecological integrity.

CHAPTER 4

TOWARDS ECOLOGICALLY RESPONSIBLE PROPERTY RULES

> It is clear today that the foundations of Locke's political theory - individualism and private property - presuppose very specific ecological conditions. Locke's theory depends upon the existence of a New World with an endless supply of spaces and resources ripe for colonization and plunder. ...Today the inviolability of individual rights and private property has been undermined by population growth and advances in technology. ...The question is whether individualism can have the same meaning, or should remain an ideal, in a world with over five billion human beings. ... [T]hese conditions [Locke's New World] no longer prevail. Because there are no more elsewheres - all the spaces are filled; all countries are settled - the question of the common good is reasserting itself with renewed force (Frodeman, 1992, 316-317).

4.1: Introduction

Private property rights as presently conceived had their origins in the social revolutions of the seventeenth and eighteenth centuries. They evolved in response to the social and environmental conditions of this period, a time of immense social and economic upheaval, yet of seemingly unlimited resources. The exclusive and inalienable rights of property proposed by theorists such as John Locke can be interpreted as the contemporary defense against absolutist monarchy and religious intolerance. However, the original trust placed in property rights to preserve 'Lives, Liberties and Possessions' against the imposition of arbitrary control has been betrayed and the situation now arises where those absolute and unlimited rights still associated with property ownership have become both a threat to liberty and to ecological integrity.

It is my contention that property rights together with the free market as the system of co-ordination, which was intended to efficiently allocate material resources, are now generating negative externalities of such a magnitude that they can be said to be failing in that primary allocative function. Private property rights were originally a response to the externality costs of the feudal system of land tenure. But they in turn have become too costly and the illiberal facets of the institution are now becoming patently transparent. The distribution and management of land and resource entitlements under the present system of private property entitlements has become problematic. In mounting the case for rethinking property rights, I illustrate their functional failure by drawing attention to, firstly, the degeneration of the material basis of property, secondly, the undermining of its social utility, and thirdly, the challenge of indigenous people's native title claims to an ideology of property rooted in exclusive and inalienable rights.

In rethinking property rights, I want to explore the kinds of limitations and responsibilities that are necessary for an environmentally sound theory of property. The restrictions involved apply to those legal rights of ownership encapsulated by Honoré (1961) in his list of 'incidents', namely the rights to possess, use, and manage, and the rights to the income, capital, and security, and to the power of transmissibility. The responsibilities concerned are not those abstract obligations generated from an abstract understanding of the interdependence of a community or an ecosystem. Rather they are a function of our relationships to other members of our community. To this end, recourse is made to contextual ethical theories where responsibilities are defined by relationships and since environmental concerns become ever more pressing, the possibilities of extending the boundaries of the moral community to include our relationships with other nature are also canvassed.

It is not my intention to concern myself with the problems of *general* justification, that is, why there should be property rights at all, for I accept that property rights in Western liberal societies are a fairly entrenched if slowly adaptive institution, as I hope to demonstrate[47]. In arguing for a more ecologically responsive concept of property, my concern is with what Lawrence Becker (1977, 3) refers to as the problem of *specific* justification, that is "what sorts of people should own what sorts of things and under what sorts of conditions".

An ethically and ecologically sound system of property entitlements would elevate care and responsibility as key norms of ownership and would also seek to ensure the balance between individual needs and ecological wellbeing. Addressing the present imbalance between private rights and public benefits will involve correcting the weighting against social and environmental responsibility. I look to a contextual ethic, such as developed by some ecofeminists, for the appropriate ethical richness. This ethic stresses care and responsibility over a procedural ethic of rights and justice. In acknowledging the communal and biophysical origins of property, property rights would no longer be seen in isolation but as integral components of a property regime whose institutional arrangements comprise an authority structure to confirm and protect entitlements and a social value set which encourages both socially and ecologically responsible activity.

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[47]A human needs based approach was adopted by Becker (1980) in his study of the moral basis of property.

4.2: The Case for Rethinking Private Property Rights

The system of private property rights is one of the cornerstones of the liberal capitalist order, but in recent decades it has become increasingly obvious that not only has it failed to provide equality of access to and a fair distribution of the material resource base (that is, just social outcomes) but also it have not furnished desirable environmental outcomes[48]. Throughout the modern period, theorists and commentators, including Rousseau, J. S. Mill, Marx, Proudhon, T. H. Green, R. H. Tawney, and Morris Cohen among others (Macpherson, 1978), have expressed concern about the unequal distribution of wealth and the plight of the propertyless, but of late, writers, such as Joseph Sax (1983; 1993) and Mark Sagoff (1988), have also drawn attention to the increasingly incontestible environmental externality costs of the system of private property ownership. Indeed, Sax (1983: 484) contends that the institution of private property is failing in its primary allocative function and is therefore in decline.

Functional failure of the system of private property is evidenced in a number of respects. Firstly, the material basis of the property system is being undermined by increasing environmental deterioration and degradation as a consequence of increasing pressure on land and resources (including the waste absorptive capacity of the biosphere). This development is reflected in the loss of productive farmland to urban sprawl, soil erosion, salinisation of irrigated farming regions (often exacerbated by tree removal), in disruption to ecosystem processes (through pesticide and herbicide contamination of waterways, infilling of wetlands for more 'useful' purposes, excess nutrient and sediment loads in marine and aquatic environments resulting in toxic algal blooms and loss of sea grass beds important in fish generation, and land clearance to name just a few sources), and on the global scale in climatic change and ozone depletion (Australia State of the Environment Advisory Council, 1996). The response of the liberal state to increasing environmental decline has been to significantly extend the regulation of rights-holders' activities[49], a development which in itself suggests the failure of the system of private property entitlements to ensure acceptable environmental outcomes. Brubaker (1995), on the other hand, interprets increased environmental regulation not as an effect of the functional failure of private property rights but as the cause of the common law's failure to protect

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[48]Some will counter that the former Communist bloc members were responsible for enormous environmental damage, but it can be argued that the West's record is only better in relative terms.

[49]Each Australian state, for example, has now over two hundred environmental statutes. A perusal of the statutes enacted prior to the 1970s reveals little reference to environmental quality.

private property rights as enshrined in laws of trespass and nuisance and riparian law. She argues that it is the erosion of common law rights by governmental legislation designed to protect the interests of industry and further growth at any cost based on the doubtful premise of protecting the common good that generates the scale of environmental degradation now being experienced.

Secondly, the social utility of private property as an institution is also being undermined by the exposure and accentuation of those inconsistencies and inequalities of property relations which have always existed, but which have been largely submerged by the continuing economic growth of the postwar period. In the last two decades, especially in those western democracies which have followed an economic liberalist path, the discrepancies between the richest and poorest sections of the community have become wider and more conspicuous. The concentration of wealth in the hands of a few is illustrated by the statistic that one per cent of the population of the US controls 40 per cent of the nation's wealth. Even in Australia, supposedly one of the world's twelve most equal societies (Travers and Richardson, 1993), in the period 1976 to 1991, the total household incomes of the higher status neighbourhoods in Australian cities (five per cent of households) increased by 23 per cent, while those in lower status households (again five per cent) declined by the same percentage. Although the concentration of wealth is not as marked as in the US, still one per cent of the population owns twenty per cent of all private wealth, while thirty per cent has no wealth at all (Australia State of the Environment Advisory Council, 1996, Sect. 3: 18, 19). These trends bode ill for both social and ecological sustainability. Moreover they are replicated at the global scale where there is an increasingly wider disparity not only within but also between the richest and poorest nations (*The Ecologist*, 1993: 103-104).

I argue that these two developments, the retreat from social justice provisions and deteriorating environmental quality, together constitute a fundamental challenge to the liberal democratic order itself. The interests of the corporate sector are presently being allowed to override those welfare provisions established to compensate for the inequalities of the property system manifested in a previous era of corporate dominance. The specific incident of property which privileges corporate interests is the right to the unlimited accumulation of resources[50]. Gus diZerega (1996a) argues that those rights of property which have the potential to allow the arbitrary exercise of power are in fact a perpetuation of the absolutism of the

[50]See Honoré, A. M. 1961. 'Ownership', in A. G. Guest (ed.) *Oxford Essays in Jurisprudence*, Oxford: Clarendon Press, for a list of the "incidents" of property.

premodern age. The increasing concentration of wealth in the control of fewer and fewer individuals and corporations at a global scale together with the imperatives of the capital accumulation process provide ever more opportunities for the exercise of despotic power through corruption of the democratic process, for increasing exploitation and degradation of the physical environment, for imposing cultural homogenization and for intensifying social injustice. Thus, just as losing the right to own slaves and the extension of democratic rights to women, minorities and indigenous peoples constituted progressive reductions in the 'realm of arbitrary power', so should removing those rights of property which allow the extremes of inequality in the distribution of resources presently emerging and the associated environmental decline. It is questionable whether liberal democracy can any longer sustain the illiberal facets of this key institution.

A third sphere which in recent decades has begun to present a challenge to western notions of property, but which also represents an opportunity for those of western heritage to reexamine their attitudes to property, consists in the conflict between native title claimants and other competing land users in the formerly colonial nations of Australia, New Zealand, Canada and the United States. Western liberal notions of property are defined by exclusive possession and utilitarian values, which are contrasted with an indigenous sense of belonging to the land embodying a multiplicity of values. According to Eugene Hargrove (1989, Ch. 2), exclusive use rights and the present-day attitudes engendered by them have their origin in prefeudal Celtic and Saxon societies. These attitudes originated in the class of freemen or freeholders of land, whose status entitled them to occupy as much land as each could use, while commanding complete dominion over the holding free of any obligations to an overlord or to neighbours or to care for the land, since, if the fertility of the holding declined, the freeholder was entitled to relocate to other unoccupied land in order to graze his animals or raise crops. Hargrove argues that it was these prefeudal attitudes to land use which John Locke enshrined in political philosophy in the seventeenth century following the disintegration of the feudal order.

Moreover, it was Locke's arguments originating in the utilitarian, economic values of land which were most supportive of the expansionary policies of the colonial occupiers. Thus for Locke, land could only be contributing to the social good if it was improved by some kind of agricultural pursuit, the corollary of which was that unused land was considered waste land (Locke, 1960, Sect. 42; 43][51]. This

[51]The references to Locke in this paper refer to the second of his *Two Treatises on Government.*

understanding, that the landscape has to be used and improved by its transformation, continues to colour present-day attitudes to land use, for there is a sense that leaving land in its original state has no value and therefore does not contribute to the social good. Wetlands are particularly noteworthy victims of these attitudes for they suffer doubly from appearing to have no human utility whatsoever and therefore must be transformed by draining or infilling to provide a foundation for some "better" human use. As Sax (1993) demonstrates, this largely results from lack of recognition of the other values inherent in land, namely, that land is already in use providing ecosystemic services. In the case of wetlands, they may function to filter sediments and ensure water quality, recycle nutrients, absorb flood waters, act as fish nurseries and provide habitat for birds and waterfowl.

The value of exclusive possession similarly continues to resonate, so much so that it has been transformed into a harmful ideology. Rose et al. (1976) have elucidated the ideology of property by making a useful distinction between property for one's own personal use (that is, householder's land and material possessions) and property which is used for capital production. The predominant ideology is that which surrounds the rights relating to the former. As they rightly point out, exclusive rights of possession and use should apply to personal possessions, but the ideology of 'personal private appropriation' has been extended to the means of capital production and property used for capital gain has been accorded the same rights.[52] But, as Rose et al. (1976, 710) also demonstrate, to extend the justifications from one form of private property to all other forms of private property is to "[blur] very real differences between the character of two distinct types of private property, serving to legitimise one with reference to the other". In effect this amounts to using arguments which justify the entitlement to one's personal possessions as a defense for the ownership and control of the capital means of production.

The consequence of this damaging combination of an ideology of property which privileges exclusive rights and the unlimited amassing of resources with utilitarian land use values together with an escalating technological capacity to modify environments is the loss of the capacity to recognize and to respond to biophysical limits. Those who subscribe to this ideology have difficulty conceiving of other values which might be inherent in land or of the responsibilities which attend ownership. Private property rights which are careless of attendant responsibilities

[52]Corporate property has been described as a 'mutation of private property'. For a discussion of why corporate property should be regarded as a subset of the private property system, see Waldron (1985: 346-348).

and ignore ecosystemic limits constitute an instrument of both social and environmental oppression.

4.3: The Social Evolution of Private Property

The relationship between the nature of justificatory theories of property and the social circumstances in which they are generated has been explored by a number of writers on property. Becker (1977, 112-113) has noted in general terms the variation in property rights justifiable within different historical and social settings. Socialist thinkers such as C.B. Macpherson (1978, 10, 201) have argued for an interpretation that sees a liberal theory of property serving the interests of a particular section of society. Under MacPherson's version, the development of the concept of private property was essential to the rise of modern capitalism in the eighteenth century. With the emergence of the market economy and the expectation that it would function as the principal mechanism for the allocation of resources among members of society, the situation demanded that rights to resources reside in defined parcels of land and material objects. Hence the owners of those material resources required absolute rights to their use and disposal, as well as unlimited rights to their accumulation, unconditional on the sort of moral or social obligations which operated prior to the seventeenth century.

Earlier in this century, in a somewhat different interpretation, Morris Cohen (1933) had conceived of the development of absolute, inalienable rights as the product of an extreme struggle to assert the rights of the individual against the absolute rights of privileged interests, backed by the divine right of kings. Included were rights to property unencumbered by the injustices and restrictions of feudalism, but the classical conception of property rights that emerged from this encounter was a negative and narrowly conceived one and has remained largely so. The rights that became central to the liberal conception of property were exclusive in nature, embodying the right of exclusive possession, use and management, that is, the individual's rights *against* others. It is a narrowly individualistic conception, which does not define one's responsibilities to the wider community. Additionally, inasmuch as, in this conception of private property, ownership is seen as a condition for freedom, "the concept of freedom with which it is associated is negative freedom or freedom *from* constraint [my italics]" (Gould, 1988, 175). It fails to provide the conditions of freedom *for* individuals both in human and nonhuman nature to develop and use their capacities, that is, "the ethical goal of free and independent individual development" (Macpherson, 1978, 200).

Through the nineteenth and into the twentieth century, the Lockean notion of absolute, inalienable rights inherent in private ownership was increasingly modified by social interest concerns which followed from the inequalities of unlimited accumulation manifested during the Industrial Revolution. With the full emergence of the welfare state in this century, the allocatory functions of the market were in part transferred to agencies of the welfare state itself and the traditional conception of property rights was modified from property in things or material possessions to a conception of property as a bundle-of-rights (Grey, 1980). Macpherson (1978, 206) further refined this conception to include exclusive rights to the consumables necessary for life and rights not to be excluded from the common capital of society, which he termed non-exclusive rights. These rights would guarantee equal access to the accumulated capital of society and its natural resources, and to an income sufficient for full human realization.

Paradoxically, in the late twentieth century, it has been the incapacity of the market to take account of its own externalities that has favoured a further expansion of the concept of "common" or "social" property to include the rights to the essentials for human life on earth: clean air and water, as well as other environmental goods[53]. Simultaneously, the concept of rights to property held in common is being enlarged on another front in response to the privatisation of publically-owned resources. Concern for negative social and environmental consequences has generated questions regarding the authority by which governments alienate common resources for the exclusive advantage of private individuals and corporations, while signalling the need for greater participation in decision-making concerning the common use and benefits of these resources. Consequently, as Macpherson (1978, 20) foreshadowed, the economic problem of the allocation of resources, originally central to the liberal tradition, has become a political problem, "a problem of democratic control over the uses to which the amassed capital [and resources] of a society is put."

Thus far, theories of property have been overwhelmingly preoccupied with the question of 'rights'. This is an inadequate approach for societies facing increasing pressure on land and resources and problems of an environmental nature, such as the quality of the atmosphere, the oceans, local environments, biodiversity loss and ecosystem deterioration. Although the Lockean conception of property with its

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[53]Carol Gould (1988, 178-189) has proposed an alternative conception of "social" property that is a refinement of the liberal view in that some of the traditional rights of property are modified to prevent the inequalities that enable the domination of others and subversion of the democratic process.

exclusive and inalienable rights lingers on in the popular perception, it has, in reality, undergone modifications necessitated by social interests concerns. At this time, the environmental imperative raises the need for a further redefinition of the rules of property that not only incorporates rights, but also defines their limits and possessors' responsibilities. Such a theory should inhere a duty of care for the management of private possessions and for property held in common.

4.4: Theories Of Property: Rights And Duties

In this section, my intention is to explore the historical development of duties appending to property rights.[54] The 'ethic of care' which is in process of refinement in feminist moral philosophy would appear to have some potential for a contribution to the present discussion.

Prior to the seventeenth century, the Christian and common law traditions emphasised the property owner's duties and obligations rather than his rights (Ryan, 1984, 19). As discussed previously, the emergence of absolute individual property rights in this century marked a change in the social functions of property. Lockean property rights removed the notion of social obligation adhering to ownership. Locke's only concessions to proprietorial responsibility were the non-spoliation and sufficiency conditions (Locke, 1960, Book II, Sect. 31, 27; see also Ryan, 1984, 36-37).

Since this time, with the exception of Kant (1991[1797], 511), the emphasis has remained squarely on the rights aspect of private property considerations. Kant's interest in duties was a limited one and related rather more to the pursuit of virtue in the property owner than the welfare of the object of those duties. Subsequent challenges to traditional theory have customarily focussed on the unlimited acquisition provision and the resulting inequalities of distribution. Rousseau, in the eighteenth century, in his *Discours sur l'origine et les Fondements de l'Inegalité Parmi les Hommes,* raised these sorts of questions, reflecting his disquiet over the relationship between property and political rights, particularly those of the landless, for it was he who was most responsible for imputing a direct relationship between genuine political equality and economic equality (*Discourse*, 81). His concern for the human condition caused him to adopt an ambivalent attitude to property, seeing in it the means for cementing individuals to society and to their fellow humans but

[54]In this I largely follow Alan Ryan's (1984) account of the contributions of Locke, Rousseau,Kant, the Utilitarians, Marx and Mill to the theory of property.

also as the vehicle for their enslavement and alienation. His interest was thus overwhelmingly a moral one but he had little to say on the kind of relationships people should have with their property (Ryan, 1984, 69).

In the early nineteenth century, utilitarian arguments added to Rousseau's concern with humanity in general, focussing on the greatest good of the greatest number or the maximisation of happiness. Utopian socialists such as Godwin and Owen advocated the notion of 'stewardship' attaching to ownership on behalf of mankind generally (Ryan, 1984, 93). Bentham extended the theme, arguing that the extent of one's property should be determined on utilitarian grounds, but neither he nor Mill's revised and humanised utilitarianism could resolve the inequalities inherent in the system of private property. Like Rousseau, Mill's concern with private property was of a moral nature, involving the justice of the institution (Ryan, 1984, 146, 148, 149). He modified the doctrine of utilitarianism to include considerations of individual liberty as well as general welfare. Any duties that were incumbent on private ownership were to ensure individual freedom and welfare (Mill, 1909[1848], Book II, i and ii).

Similarly, a preoccupation with individual freedom and welfare characterised Marx's treatment of property relations. His concern was to abolish bourgeois private property as the root of worker exploitation and alienation. Although there was no overt interest in the duties attaching to property ownership, it would be fair to conclude that Marx's belief that many of the ills of capitalism could be attributed to the private ownership of property supplied the foundation for the presumption by some critics a century and a half later that the excesses of capitalism are chiefly responsible for current environmental crises.[55]

Private property survived Marx's onslaught, but the concept also underwent modification such that in the late nineteenth century through into the early twentieth century, moderate liberals such as T.H. Green and moderate socialists like R.H. Tawney and Morris Cohen made theoretical contributions that enabled the state to establish limits and/or impose duties that were consistent with the general welfare (Macpherson, 1978). Green introduced a moral quality to the liberal theory of property, although like Mill he was unable to resolve the contradiction of unlimited accumulation. An individual should have the moral freedom to shape his own circumstances, unlimited by ancient custom. This involved the liberty to appropriate

[55]Marx's thoughts on the relationship between the miseries of capitalism and private property are contained in his *Early Writings*.

as much property as necessary for his moral freedom, to "be at once secure and controlled in it by the good-will, by the sense of common interest, of a wider society" (Green, 1885-88, 109).

In criticizing the exploitative capabilities of capitalist property, (Tawney, 1982 [1921], 49-79) saw the small land-holder as the valid owner of property. One's personal possessions and property should be limited to those necessary for a "healthy and self-respecting life". The obligations implicit in ownership were of a personal nature, involving the conduct of the proprietor's profession and the maintenance of his household.

Just prior to the Great Depression, in explicit recognition of the inequalities of unlimited accumulation, Cohen (1933) established the principle that property is a relationship of power between persons, from which he deduced the right of the state to set limits and impose duties consonant with the general welfare. Hence limits are to be set to protect not only the interests of other property owners but also for the sake of public safety, health, peace, morals and the general welfare of the community. The major advance of Cohen's contribution in the context of duties and responsibilities was to enlarge the theory of property, which he recognized as embodying negative rights of exclusion and inalienability, to one which incorporated duties enforceable by the state.

It was not until 1961 that Honoré (1961, 113), in listing the "incidents of property", specifically alluded to "the prohibition of harmful use". Ownership of property involves "the right (liberty) of using as one wishes, the right to exclude others, the power of alienating and an immunity from expropriation", but, what is singular in the present discussion, is that he also recognized the possibility of deleterious effects that could be wrought by property owners. The importance of his insight notwithstanding, his interest in harmful use reflected an ongoing preoccupation with social welfare concerns and although he recognized that "the positive duty to exploit one's property in a socially beneficial way, as opposed to the prohibition of a harmful exploitation, has not been generally imposed or its implications fully worked out", the concept and its implications remained undeveloped (Honoré, 1961, 146).

It took the threat of rapidly depleting natural resources, occasioned by the oil price shock of 1973, to kindle a redefinition of the extent of private property rights. This was provided in the work of Lawrence Becker (1977, 2), who anchored his

redefinition in an explicit recognition of existing constraints on acquisition and rights and, what is perhaps more relevant in the present context, of increasing scarcity of natural resources. In Becker's work we find the first definitive attempt to develop the question of positive duties towards others along the lines that Cohen had called for a half century earlier (Becker, 1977, 108-9). It is noteworthy that the notion of positive duties attaching to property rights did not yet extend beyond one's fellow humans to the natural environment. Notwithstanding this shortcoming, Becker's major contribution was his recognition of the anachronistic nature of the present system of ownership: "[T]he justifiability of the full, liberal ownership of land under the social conditions which existed in seventeenth century North America does not guarantee that such property rights can be justified" (Becker, 1977, 110). His rationale for limitations on property rights is grounded in arguments of exhaustibility, accumulation and harmful use. In the first case, arguments from the exhaustibility of resources demonstrate that goods may be depleted either through appropriation or misuse. Hence the need for restrictions that limit the use and management rights of owners, with the goal of preventing exhaustion. Arguments against unlimited accumulation can be based on the loss of competitive advantage, restrictions of material liberty, or the possibility of significant social instability. The importance of his analysis of the possibilities of restrictions on unlimited acquisition is the recognition of the perils of undue influence on political and social institutions to be had from accumulations of corporate wealth. He notes that the advantages accruing to such corporate accumulations of power "tend to snowball" and that the implications, not only for the misuse and exhaustion of resources, but just as importantly for the democratic ideal, are immense.

The ramifications of the prohibition against the harmful use restriction, listed by Honoré as an incident of property some years earlier, were explored by Becker, who saw that it provided a basis for legal limitations in areas where the problem was not one of exhaustion or accumulation. Thus it would cover the use of pesticides and herbicides and their seepage into water supplies, for example. In an even more environmentally sensitive era it would cover the drainage of nutrient-laden effluent into receiving water bodies, negatively impacting on marine and aquatic ecosystems.

Becker's development of arguments for limitations on property rights and his exploration of the forms that those limitations might take constitute a major advance in the development of a concept of property that is sensitive to social and environmental limits. In a social context, he foresaw the need to vary forms of ownership and their relevant use and capital rights between heavily populated and

highly industrialized urban areas and less densely populated rural regions. Politically, he advocated new restrictions on accumulation given the implications for democracy stemming from the inordinate political power and influence garnered by accumulations of corporate wealth. And environmentally, the conservation of essential depletable resources (clean air, water, fossil fuels) having become a necessity, it could mean the restriction of rights or indeed the "management, use, and possession [of these resources] effectively under public control" (Becker, 1977, 116-7). Although Becker's work is still firmly anchored in the ethical milieu of rights and justice, nevertheless, it does signal a shift from an almost complete preoccupation of property theorists with human welfare to an interest in the larger environment.

During the 1970s, realization of the value of the built and natural heritage understandably led to perceived tensions between property rights and what Goodin (1990; 1992) calls 'preservationist duties'. It was inevitable that a theoretical attempt would be made to reconcile apparently conflicting rights and duties and to justify the protection of 'irreplaceable assets' (Goodin, 1983). Goodin's aim, in demonstrating that property rights do not embrace a 'right to destroy', was to establish that duties to protect heritage values proposed by conservationists do not violate property rights. Indeed, the 'right to use' something implicitly entails a 'duty not to destroy'. Thus, "use rights are always bounded by preservationist duties, and in some cases that might mean that in effect there are no use rights at all....[T]he duty to preserve which is implicit in the right (merely) to use will prevent us from availing ourselves of the right to use (and hence use up) consumable, irreplaceable assets" (Goodin, 1990, 412). Goodin argued for a 'trustee' basis for property, at least with regard to irreplaceable objects.

In grounding his arguments for preservationist duties in the accepted justifications for property rights, that is desert- and utility-based justifications, Goodin remains predominantly grounded in the rights and justice ethic. However, the up-dating of his negative 'duty not to destroy' to a positive 'duty to preserve' indicates a shift in the ethical emphasis to a concern with the responsibilities accompanying the rights of ownership. This is a timely shift considering the potential that technology now provides for humans to modify and indeed to destroy environments. However, I would contend that a much stronger justification for dealing with the natural environment than a duty to preserve is required.

Goodin's contribution to a developing theory of property rights and duties is the product of a particular era of environmental consciousness when attention was

centred on the conservation of particular objects and end-states. Accordingly, concern was concentrated on conserving specific historic buildings or particular species - panda bears, whales and seals - rather than on the urban systems or ecosystems of which they were but a part. Duty was couched in legal terms, in the language of animal rights, for example. However, growing understanding of the complexities and interconnectedness of natural and human systems demands further redefinition of the relationship between property rights and responsibilities. Such a redefinition would combine Becker's limitations on property rights and Goodin's duties of preservation with a rather more positive ethic of thoughtfulness and care in humankind's relationships with physical nature and between fellow humans.

My goal in this section has been to demonstrate that in the relationship between property rights and duties there has been a subtle shift from an emphasis on absolute and individual rights to a concern for social justice and in recent decades to an emerging focus on the duties and responsibilities of property ownership. Ostensibly there should be little impediment to the development of a theory of property more appropriate to the social and environmental pressures of the late twentieth century, although, as yet, there is little evidence either by mainstream or environmental theorists of any significant attempts in this direction, despite the centrality of property to modern life and to these crises. One exception is Gary Varner (1994), who goes so far as to argue that environmental regulation has so weakened land as private property by specifying more and greater nuisances that its eclipse is imminent (see also Beatley, 1994, 196-196 on the changes wrought by environmental considerations on the bundle of rights).

4.5: Foundations For A New Theory: Extending Our Ethical Horizons

In this section, I endeavour to argue that the crises identified above necessitate a different philosophical basis for property rights, one that transcends individual rights and anthropocentrism. Environmentalists have been critical of the narrow ethical basis of western societies, which has so far limited our thinking on ethical issues specifically to individual rights and generally to human welfare, for several decades now. They have been saying that we need to broaden our ethical horizons, that it is just not human welfare with which we should have an ethical concern (Devall and Sessions, 1985; Eckersley, 1993; Leopold, 1949). Ecofeminists in particular have made a significant contribution to moral theory by proposing an expanded ethics which goes beyond a narrowly focussed rights-based ethic to one which is contextual in nature (Warren, 1990). Feminists, using Carol Gilligan's

(1982) seminal work on gender-based differences in moral development, have counterposed an 'ethic of care' to the prevailing 'ethic of justice', while Iris Marion Young (1990) has attacked the nature of contemporary theories of rights and justice for their emphasis on rights to material possessions, an emphasis which restricts the scope of justice. Widening the scope of justice was also the objective of Agnes Heller's (1987) proposal for an ethico-political concept of justice, in which moral goodness is an essential component, an element lacking in modern theories of justice with their bias towards distributive fairness.

4.5.1: Reconceiving Justice

A discussion of a more appropriate theory of property cannot be conducted independently of a discussion about justice. Agnes Heller (1987) has critically described the philosophy of traditional and modern concepts of justice. She has explored the disintegration of the traditional concept of ethico-political justice and its final split in the eighteenth and nineteenth centuries into a philosophy of morality and a socio-political concept of justice. During this period the latter concept was substantially modified, such that justice came to be construed as 'fairness', the "shabby remnant of the 'sum total of virtues' that was once called justice ... [and] the question of the best possible *social* world was centred mainly on the problem of 'just distribution'" (Heller, 1987, 93). Moral principles lost their guiding import and questions of justice and injustice are now evaluated according to an instrumentally rational view of society (Heller, 1987, 153).

The inadequacy of the socio-political concept of justice to respond to the questions raised by advanced industrial society educes the need for a more appropriate ethico-political concept of justice. The socio-political concept of justice does not provide the kind of yardstick that is required for evaluating what is valuable in our society. In response to the crisis of moral consciousness facing western society, Heller proposes an incomplete ethico-political concept of justice, incomplete because it eschews universalism by not providing a single 'ideal' pattern for a way of life, nor a single ethics. It allows for the existence of any number of ways of life and, what is relevant in the present context, it "excludes relations of superordination and subordination, hierarchy and domination. It includes social intercourse, communication, mutual understanding, co-operation and the like" (Heller, 1987, 222). The normative foundation furnished by her incomplete ethico-political concept of justice provides just socio-political norms which have moral goodness as an essential component.

In constructing her normative theory of justice, Heller employs Habermas's concept of the fundamental principle of universalization, which she reformulates as the universal maxim of dynamic justice, and his discourse ethic, which is modified to become value discourse. Value discourse must have recourse to the two universal values of life and freedom. The optimum socio-political world is one where the universal value of freedom does not contend with the universal value of life: "The *telos* of the best possible socio-political world is inherent in all actions in which people live up to the universal maxim of dynamic justice [and] the best possible socio-political world is the condition of the best possible moral world" (Heller, 1987, 256). All norms should be validated by reference to the universal values of life and freedom.

Thus Heller's theory of justice contains more possibilities than existing theories which restrict themselves to claims about distribution and fairness, because she internalizes the universal values of freedom and life as the essential moral authority. As well, socio-political norms are not static but dynamic, because they are open to testing through practical reason, where the means to achieve their validation is through the process of value discourse, as the only just procedure.

On a similar tack with her analysis of modern theories of justice, but with a slightly different approach to its reconception, is Iris Young's formulation of an ethic based on 'doing' rather 'having', on justice as 'empowerment' rather than justice as 'distribution' (Young, 1990, Ch.1). Current theories of justice emphasise material possessions and, in doing so, limit the scope of justice, because they are unable to place any value on intangible nonmaterial aspects such as rights, opportunity and self-respect. Treating such values as quantifiable and capable of being distributed ignores the fact that individuals are as much constituted in these aspects by social processes as they are by the possession of goods. Expanding the scope of justice to encompass a process-based ethic that focusses on 'doing' as well as 'having' has the potential to shift our thinking and attitudes towards others from what they have to what they are. Like Heller, Young (1990, 9) sets forward an expanded concept of justice resulting in a much wider meaning to politics and in the introduction (or reintroduction) of other facets of justice, including collective decision-making procedures, the social division of labour, and culture. Together with many other critical theorists, she argues that the distributive paradigm of justice tends to assist and accentuate the depoliticization of public life that has occurred under welfare capitalism by making decision-making the province of experts. By extending the

concept of justice to also include "action, decisions about action, and provision of the means to develop and exercise capacities", she seeks to repoliticise the social structures and processes that produce both material and nonmaterial distributions (Young, 1990, 16).

Contemporary ethical theories, in emphasising the rights of the individual, de-emphasize relationships between humans and between humans and other nature. An enlarged conception of justice, in expanding the meaning of the political, would reinvigorate and revalue such relationships. The implications for the theory of property of such an enlarged ethic of justice are considerable. The limitations of prevailing theories of property reside in their emphasis on the individual entitlements inherent in possession or ownership. These are incapable of providing the foundation for an adequate set of relational practices of ownership that are sensitive to the needs of other humans or indeed of nonhuman nature. The current situation with regard to relationship is one of individual to individual; who is entitled to what. Because the kind of ethic of justice proposed by Heller and Young expands the meaning of the political, communities of individuals would collectively decide, for example, what use rights were appropriate, which should be curtailed and who should have what rights in the context of contemporary social, economic and environmental conditions. Use rights, including the management of one's property and possessions, would be determined by responsibility to the relationships with other community members, both human and non-human.

4.5.2: Expanding Moral Theory

Several feminist philosophers, in their endeavour to achieve women's emancipation and human liberation, have similarly attacked modern moral theory for its restriction to just a single moral orientation, the ethics of justice and rights, while attempting to demonstrate that women's experience reveals another aspect of moral judgement, that of an ethics of care and responsibility. Carol Gilligan (1982), in response to Lawrence Kohlberg's theory of moral development, has argued that moral development is different in males and females. Hence men generally comprehend morality in terms of rights, entitlements and obligations founded on the demands of fairness and impartiality, while women's moral judgement is more contextual, arising from the particular needs of others in particular relationships. The moral categories that underpin these relationships are care and responsibility: "Morality is seen... as arising from the experience of connection and conceived as a problem of inclusion rather than balancing claims" (Gilligan, 1982, 160).

Notwithstanding subsequent criticisms of an unproblematic application of the ethic of care (see Card, 1988; Flanagan and Jackson, 1987; and Tronto, 1987), the significance of Gilligan's contribution lies in its querying of the narrow focus of modern moral philosophy and, by means of her "different voice", introducing for consideration previously ignored moral qualities of care, responsibility, sympathy and empathy. Indeed, these are the qualities which the liberal philosophers of the Scottish Enlightenment, Smith, Hume and Ferguson, thought would balance the interests of others against the interests of the self. This was not to be and the latter, expressed politically as rights and justice and backed by the zealous application of instrumental reason, have come to predominate in liberal capitalist societies (see also Chapter 6.2 on empathy in the tradition of evolutionary liberalism).

Christine Cuomo (1992), writing with ecofeminists insights, has also explored the moral problem of an unqualified 'ethic of care'. She notes that caring is not always a "healthy and ethical choice for a moral agent"; that, for example, many women have suffered abuse and oppression because of their caring capacity (Cuomo, 1992, 355). In opposition to some feminists, she warns against reclaiming aspects of women's experience that have been devalued by patriarchal culture and maintains the need to thoroughly examine and recontextualize those aspects of caring which are the product of women's socialization within that culture of oppression. She also takes issue with those feminists who recommend ego denial as a necessary prelude to empathy with other beings, proposing instead that one's own experience and interests should be "the point of departure for any ethical decision-making and theory building" (Cuomo, 1992, 355). What is most ethically useful in the present context is that she establishes the necessity of defining both the object of care and the caring context. Thus the ethical relevance of caring is rooted in the context of care and in appropriate objects of care. This raises ethical questions concerning the human stewardship of land and other nature, whether "caring for, or caretaking, land and nonhuman individuals and species is in the best interests of those objects of care" (Cuomo, 1992, 357). Nevertheless, an ethic of care that encompasses both nonhuman nature and the human world as well as defining the appropriate objects and contexts of care is a more than useful contribution on which to ground an ethically enlarged conception of property.

In her endeavour to define an ecofeminist ethic, Warren (1990), borrowing from Cheney, shifts the primary focus of ethics from a predetermined set of rules, principles and rights that is applied to competing moral agents to a view that

conceives of ethics as growing out of one's "'defining relationships' - where our relations with others are central to our understanding of who we are" (Cheney, 1987, 122). Rights therefore become contextual and "what makes them relevant or important is that those to whom they apply are entities *in relationship with* others" (Warren, 1990, 141-2). The moral community is prior to any considerations of justice, fairness and equality. "Considerations of obligation, fairness, and so on grow *out of* an analysis of the nature of friendship, care and love" (Cheney, 1987, 136). Such considerations have generally been of secondary importance in moral theory for, as Tronto (1987, 654) observes, "the requirements of justice have traditionally set the boundaries of care."

Contextual moral theory has been further developed by Cheney (1987, 144) to extend the boundaries of the moral community to include the nonhuman, "the limits of moral regard [being] set only by the limitations of one's own (or one's species's or one's community's) ability to respond in a caring manner, which, in turn, are a function of the depth of one's own understanding of the human moral community and the clarity and depth of one's understanding of, and relationship to, the nonhuman world or elements of that world." From such a different ethical perspective, a system of rights and justice is seen as a technique for dealing with situations in which the web of moral relationships has failed or is not yet in place, that is, in limiting cases. Thus "care may set the boundaries of when justice concerns are appropriate" (Tronto, 1987, 659).

4.5.3: Summary

The expansion of moral theory has significant implications for the present discussion of property rights. Firstly, the recognition that moral considerations are constituted not only in the ethical space of justice and rights but that they also involve an ethics of care and responsibility has the effect of relationships assuming the centrality that instrumental rationality now exercises over questions of justice and rights. Rights then become contextual and dependent for their relevance and importance on the relationships between the entities involved. Problems of land use and property management thus come to be defined within the web of relationships and the obligations that are derived therefrom, whether they be to fellow humans, to other species or to ecosystems.

Secondly, recognition of a care ethic in human relations has provided the foundation for an expansion of the boundaries of the moral community to the

nonhuman world. Analyses of the care ethic have also raised questions concerning the appropriate kinds and contexts of care, and what is in the best interests of the objects of care. Acceptance of these innovations in moral theory enables us to begin asking the appropriate kinds of questions concerning the management of our material possessions and our relationship to both the human and nonhuman worlds. If we are to recognize Cheney's advance in moral theory, that depends on no less than a deep and "richly textured" understanding of what it means to be human.

Lastly, I have attempted to reground property in an expanded conception of moral responsibility, which would guide both interhuman and human-nature relationships. Such a relational *ethic of responsibility* becomes ever more essential as our capacity to modify ourselves and our environment progresses apace. As I have earlier noted, current concepts of property with their emphasis on individual rights and entitlements lack the capacity to furnish a basis on which to ground a set of relationships between society and nature appropriate to the social and environmental conditions of the late twentieth century. The reawakening awareness of human contingency and fragility that follows mounting environmental crises establishes the conditions for the recognition that preoccupation with individual rights is an insufficient ground for sustainable relationships with each other and with nature. Qualities of care and responsibility possibly assume greater significance in moral judgements about such relationships, in which our responsibility to ensure *life* and *freedom* to all those entities with whom we are in relationship becomes the ultimate moral responsibility. Such an *ethic of responsibility*, as Melucci (1989, 160) says, could have the effect of invigorating the relationships of the individual to fellow humans and to the rest of nature. It would not "evade the risks of choice [and would be] capable of meta-communication about choices themselves". It would originate in the individual's relationships and would ensure the kind of communication necessary to maintain all of one's relationships in a sustainable fashion.

4.6: Alternative Property Regimes

As the magnitude of environmental issues grows so does the need to rethink individual private property ownership as an institution for allocating access to land and other resources. There have been a number of responses to rethinking private property rights ranging from those which advocate the reinstatement and strengthening of common law provisions to protect environmental quality to those which would modify private property rights such that they would reflect their biophysical and communal context to a greater degree.

Among the first group are the arguments of Elizabeth Brubaker (1995) who would strengthen the common law provisions of trespass, nuisance and riparian law on the basis that they adequately protected environmental quality prior to their legislative and legal erosion by governments and the courts for the purpose of promoting economic growth and the interests of industry. She is of the view that the common law can still perform that function and, like Hardin, she argues that it is the absence of property rights and additionally the preponderance of government regulation that allows resource companies to trample on the ownership rights of others by overextracting and/or polluting with impunity. Moreover, she argues, ownership both facilitiates and promotes stewardship while environmental resources are more likely to be protected when those individuals and communities having a strong interest in their preservation are assigned property rights in them. This may be so, but only under the absence of external pressures to overexploit. Graziers in Australia's semi-arid zones, for example, may be forced to overstock their lands by any combination of circumstances beyond their control such as unpredictable prices for primary products on world markets, the lending policies of banks, the rescinding of fuel subsidies and so on (Webber, 1994).

Prior to the advent of industrial-scale production in the nineteenth century, the common law provisions of trespass, nuisance and riparian law were relativley easy to apply to gain redress for environmental damage, whether to air, water or soil. Technologies were of a relatively small-scale so that damage was usually localized; and perpetrators and victims fairly easily identified. The use of the courts to protect rights to a clean environment is of necessity limited to geographically and temporally proximate owners and where the resources of owners to pursue grievances through the courts are also roughly equal. Until the nineteenth century this was largely the case and, as Brubaker (1995, 30-63) discusses, there were many successful prosecutions. The emergence of the industrial economy in the nineteenth century and associated concentrations of wealth and power has made court action that much less likely. As well, many environmental effects have a long lead time or they may be felt in far distant places with little if any connection, such as those caused by exposure to nuclear radiation or acid rain respectively. They may also be impossible to attribute to particular individuals. The skin cancer sufferer has no particular person or corporation to blame for the ozone depletion which facilitated the development of his/her cancer.

Brubaker's advocacy of private property rights ignores the question of the scale of technology available to present day owners. To rely on the courts to protect critical or particularly vulnerable habitats, such as wetlands, is unrealistic. With the kinds of technology now available to effectively destroy habitats in a very short time, it may be too late by the time concerned persons have recognized a particular threat and sought a court injunction. Moreover, Dobson (1998, 154-5) (after Nozick) points out that reliance on court action *per se* is problematic, since people are often deterred by the potential transaction costs of seeking redress through the courts. Transaction costs are a direct result of the inequalities of power and resources.

There are other limits to privatizing environmental assets. There are some assets which cannot be privatized, such as the global oceans and the atmosphere, although regimes of tradeable quotas have been developed for some fisheries and environmental economists favour granting shares in the waste absortive capacity of the atmoshere. While shares can be allocated in particular species in the ocean and ceilings applied to air pollution through emissions trading (notwithstanding the problems inherent in these particular privatization strategies of limited and imperfect knowledge and enforceability – see Dobson, 1998, 154), I cannot see any way in which the global weather systems could be privately owned and it is these critical systems which are being compromised by current levels of fossil fuel use and biomass burning. In addition the difficulties of assigning boundaries to assets such as genetic resources are particularly complex. The amount of knowledge required to assign rights to all plant materials, for example, simply makes such an assignment nonfeasible.

Dobson has specifically identified the inherent inequality of private property rights regimes as a factor which severely limits their application in protecting environmental quality. These inevitable inequalities generate transaction costs which must always constitute "a sustantial defect in private property approaches to environmental problems" (Dobson, 1998, 155). And relatedly, with respect to global environmental assets such as germplasm, an equitable distribution of wealth has been similarly specified as a precondition for the assignment of property rights. The environmental assets of poor countries are likely to be exploited by wealthy countries, firstly, because poor countries will compete with each other thus forcing prices down and, secondly, because what is a high price to the poor is a low price to the rich (Dobson, 1998 156-7). The ultimate outcomes are further transfers of wealth to the developed world and further environmental degradation in the poor countries because the low prices they receive for their assets are no incentive for stewardship.

The inherent problem of the *status quo* system of property entitlements, in which individual property owners are legally independent but in actual fact ecosocially interdependent, is the generation of externality costs (Bromley, 1991, 68ff.). These externality costs are presently translating into novel social and environmental scarcities, which a Lockean property regime with its underpinning of exclusive rights and utilitarian values has limited capacity to capture. Similarly, the Kantian system of rights and correlative duties, such as proposed by Bromley (1991) can only partially internalize these externality costs in so far as individual property owners recognize their obligations to other rights holders who must be geographically and temporally near[56]. It cannot ensure the collective wellbeing of all existing and future communities both human and nonhuman, because the interests of those without a voice of necessity are not taken into account.

To address the needs of those outside our immediate community and of future generations, if we are to maintain ecological integrity, we need an alternative means of ensuring fair access to the stream of environmental benefits both now and in the future. Property entitlements must necessarily recognize both contemporary social realities and ecological limits. An ecologically sound regime of property would embody institutional arrangements which include a value system and an authority structure which steers rights holders in the direction of the socially and ecologically responsible exercise of their entitlements as well as confirming and protecting property claims. It would encompass planning and decision-making mechanisms for coordination across boundaries at different bioregional scales.

A number of alternative property regimes, which acknowledge the biophysical and communal origins of property to varying degrees, has been proposed. Using the Kantian principle of rights and correlative duties, Daniel Bromley (1991, Ch. 9) has identified the potential of a property regime which incorporates values other than economic values in the changing preferences currently being observed in western democracies. This shift in social value sets involves a change in how rural landscapes are valued, from a rural economy wherein land is seen as a factor of production in agriculture to a situation where agriculture is regarded as an economic activity which invests rural communities with a particular character. In this schema, land-holders' activities are determined by the demands of rural amenity, which includes maintaining environmental quality, wildlife habitat and aesthetic appeal.

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[56]Elsewhere, Bromley (1989) proposes overcoming the intertemporal bias of Kantian rights and correlative duties by protecting the rights of future generations by a rule-based entitlement structure.

The level of environmental quality is specified at the collective level, leaving farmers the right to manage their properties as they see fit within the parameters set by the community. Under these arrangements the burden of proof shifts from the collective to the farmer, who must justify that any proposed development on his land does not prejudice the community's amenity standards.

Another schema which privileges the biophysical basis of property is that proposed by Joseph Sax (1993), who postulates an "ecosystemic" model of property founded on an ecological perspective which "views land as consisting of systems defined by their function, not by man-made boundaries" (Sax, 1993, 1442). Land is regarded as part of an ecological community, where the landowner assumes a stewardship role over ecological functioning. Property lines are reduced in significance as connectivity assumes greater importance. Use rights are determined by the physical nature of the land and its ecological services rather than all land being equal in use rights. Wetlands, for example, perform crucial ecological regulatory functions and it is difficult to argue their transformation to some better human use. Thus some natural systems may be judged to yield greater benefits to the collectivity by remaining in their natural state and consequently development would not be an automatic entitlement of ownership. As under Bromley's Kantian framework, the onus shifts to the potential developer but is deepened to require that not only is the developer's private benefit compatible with community preferences but also with ecological goals. As a consequence the line between public and private realms of ownership which is clearly drawn under the status quo system becomes much less distinct. However responsibilities become more explicit as the field of care shifts beyond the self and the claims of other rights holders to the maintenance of ecological functions and the long-term quality of the land.

While Sax's model addresses the need to factor the biophysical substructure into property arrangements, it is deficient in that there are no explicit institutional arrangements for decision-making and coordination within and between communities. It ignores the communal milieu, which should be an integral part of any property regime. The communal is implicitly acknowledged in Bromley's proposal, although the institutional framework by which community preferences are shaped and converted into ecologically sound collective decision-making and social values is not necessarily assured[57].

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[57]I have confined the discussion to private property rights regimes although there are good justifications for some goods to be owned as common property as Elinor Ostrum (1990) has proposed.

4.7: Private Property Reconceived

As a central social institution in western democracies, private property is clearly in trouble, the emergence of environmental limits bringing the legitimacy of private property and acquisition into serious question (Wissenburg, 1998, 2). In the context of ecological limits and widening wealth disparities, Lockean property rights, though they have been modified over the last century, remain overly generous. The paradox of exclusive rights, though originally intended as protection for the individual against authoritarianism and arbitrariness, is that an increasingly greater proportion of citizens is excluded from any property whatsoever (Heller, 1988, 138). Property can only be legitimate when all citizens have the stake in society which is their just desert (Hirst, 1994, 10) or when ownership is generalized (Heller, 1988, 140) and the bias against ecological sustainability is reversed.

What is most troublesome about the full conception of exclusive property rights is the justification it gives to the use of property for social domination and economic exploitation (Gould, 1988, 175) and the threat that the amassing of resources and power presents for the democratic process (Hawken, 1993, Ch. 7). The principal agent of domination is the capitalist corporation, which has the same rights as the individual property owner but which is absolved from the conventional responsibilities of ownership (Stillman, 1977, 222-224). Stillman attributes corporate irresponsibility to bifurcation of control from ownership and blames corporate irresponsibility in large measure for the ecological problems of the present. As he remarks, corporations, with their tendency for growth and with the present constitution of rights, are "not suited for ecological responsibility nor for a society with limited growth" (Stillman, 1977, 233). Responsibility could be reconnected to control and growth restricted, for example, by annually requiring shareholders to specify what proportion of their net profits can be reinvested in the company instead of company managers reinvesting all profits to grow the company and for their own aggrandizement. Recently, too, there has been discussion concerning the possibility of revoking the charters of those corporations which are consistent violators of social and environmental standards (Hawken, 1993, 106-107).

As well as reining in the extent of property rights, the realities of looming social and environmental crises also mean that the moral basis of property in rights and justice must be modified and, indeed, shifted to care and responsibility. Priority has to be given to the ecosystemic and communal bases of property, which have largely been ignored by the Lockean system. Property would then be redefined to

reflect a broad range of individual and community rights and responsibilities. Morrison (1995, 176-178) proposes referring to such property as 'personal' property rather than private property, because, he says, it "recognizes an essential connection between the use of property and community wellbeing". Ownership includes not only personal possessions but also extends to the ownership that involvement in community associations confers. Social and ecological responsibility are key ethical components of this revised notion of ownership. Where the communal and biophysical bases of property are implicit in property regimes, the implication is that there are "limits on the ability to use, to dispose of, and despoil property and the commons" (Morrison, 1995, 177), while the freedom to use is balanced by responsibilities to maintain the community and commons. Personal property gives priority to stewardship, whereas private property valorizes acquisition and control.

The approach of ecological limits has also had the effect of changing our notion of wealth, to focus away from that which is privately accrued and towards that which is shared. In 1983, Joseph Sax (1983, 494) noted that there was a transition occurring "in which an ever greater proportion of our wellbeing is realized in the form of shared wealth, or things that are non-exclusively consumed, rather than in the form of privatized or exclusive-consumption wealth". Moreover, ecological concern has served to remind us of the fact, obscured by the preoccupation with private property rights in modern times, but long ago recognized in Roman law, that there are some goods which simply cannot be owned by individuals. These are truly public goods: "They cannot be captured or reduced to possession; they can only be used. And as no individual can own them, they are by right available to all" (Varner, 1994, 157). These are the commons elements of air, the oceans, wildlife and ecological processes generally. Indeed, the realization that all land contributes to some degree or another to ecosystemic processes may eventually mean that private property will cease to exist (Varner, 1994, 158) and the preoccupation with boundaries supplanted by connections across land units (Sax, 1993, 1445-1446). To protect the rights to these public goods, property must have a communal rather than an individualistic setting[58].

[58]Existing methods for the communal regulation of property are to be found in community land trusts, in the splitting off of development rights to preserve rural land and communities (Morehouse, 1989; The Institute for Community Economics, 1982).

While we are coming to view wealth differently, we also need to find different ways of valuing land. On the basis of the labour theory of value, the value of land is that which it takes to improve it, measured as the value of its produce. To be sustainable, the environmental quality of the land should also be factored in (Orr, 1994, 197). This might prove logistically difficult, but a start could be made with defensive expenditure, the sum expended to restore, recover or maintain environmental quality. There may need to be incentives offered, such as tax rebates, as an encouragement for such expenditure and for good land use practice[59].

The blurring of the boundaries between public and private spheres, which is the direct result of the realization that wellbeing is derived from shared as well as private wealth, has profound implication for the identification of members of democratic polities. The citizen in the early public sphere was first and foremost a property-owner and, although the franchise has since been extended and the notion of property entitlements expanded to a 'bundle of rights', nevertheless, identification today is largely through one's consumption and ownership patterns. In liberal society, the responsible citizen is he who protects his private interests by acting in the public sphere to preserve the "stability of the property order" (Habermas, 1989, 87). In the ecologically sustainable society, it is encumbent on the responsible citizen to preserve the public property of ecological processes. This innovation is likely to be driven by increasing recognition of the value of these processes and their increasing scarcity (Wargo, 1988). To ensure sustainability, identification must shift to non-consumption values and other virtues, such as responsible use, maintaining environmental quality, or contributing to socioecological wellbeing. The citizen is neither private nor public, but responsible, acting to maintain communal property and defend public rights, because individual wellbeing and ecosystemic wellbeing are interdependent. The responsible citizen acts according to the "principle of propriety", the principle that "action should be appropriate to the nature of all parties involved in the transaction" (Rodman, 1977, 109) rather than according to the principle of property, which implies control.

4.8: Conclusion

I have attempted to show that current rules of property are inadequate for the kinds of environmental problems that now beset the planet. As we develop a deeper understanding of the complexities of natural systems and of the dramatic and far-

[59]See Webber (1994) on the institutional discouragement to good land use practice among Australian farmers.

reaching effects that human systems can have in their interface with natural systems, our rules of property must begin to reflect such complexity. I have set out the elements of a theory of private property more appropriate to the kinds of ecological conditions that confront us in the late twentieth century, which, as has been demonstrated, are vastly different from those obtaining in Locke's seventeenth century. Moving away from a theory with an exclusive emphasis on rights to one that encompasses an element of moral responsibility is an essential component of any innovation in theory. The work of feminist theorists furnishes the kind of theoretical basis that could enable the development of a theory embodying a positive ethic of care and responsibility beyond egoistic individualism. The concept of *equal positive freedom* demands an alternative conception of property that signals a needs-based approach to property rights and a system of property that takes account of all needs, both human and non human[60].

Extension of the moral community to include nonhuman nature as well as humans is also a necessary prelude to defining our responsibilities, which, in a contextual moral theory, are set by our relationships to other humans, other species and ecosystems. Such an expansion of moral theory has enormous ramifications for how we handle these interconnections, which, I have argued, must be guided by an *ethic of responsibility*.

[60]Eckersley (1993, 121), after Benton, has observed that there are no ontological difficulties in extending the needs-based approach to justice beyond the species level to include all nature.

PART II:

THEORIZING THE TRANSITION:

CONCERNING THE PRAXIS OF SUSTAINABILITY

CHAPTER 5

TOWARDS A RADICAL ECOPRAXIS

5.1: Introduction

Modernity has always had its critics, beginning in a recognizable form with the Luddites, and followed by the Romantic movement in the nineteenth century. In this century, modernity's theoretical resources and their practical consequences have become the subject of profound criticism from the Critical Theorists of the Frankfurt School, from theorists of the postmodern, and most recently from new social movements (peace, feminism and ecology). The ecological critique is the most radical because it is a civilizational critique.

However necessary critique is though, it is insufficient in itself to initiate processes of societal transformation. Like the *philosophes* of the early modern period, environmental theorists must also furnish the means of going on. Environmentalists have developed a more than adequate understanding of ecologically desirable endstates but have so far inadequately addressed the processes of getting there, that is, *praxis*. And this is precisely the criticism that both Peter Hay (1992, 223) and Andrew Dobson (1993, 192-193) make, the former describing the green movement as "strategically inept", while the latter criticizes the undertheorization in green social thought of the strategic facets of social change and its embeddedness in material human practice. In response to these criticisms, it will be the task of this chapter to set out the elements of a possible ecological *praxis*. If sustainability is to be the object of a radical ecopraxis (and I intend to argue at a later stage of the discussion that it is a fitting subject), then, firstly, some of the obstacles to sustainability and to societal transformation (at the system level, at the institutional level, and at the individual/personal level) should be identified and, secondly, possible sites for relearning the art of earth-dwelling (Orr, 1994) similarly so.

As a prelude to outlining the dimensions of a radical ecopraxis I present an overview of Aristotelian and Marxian understandings of *praxis* and indicate how they might inform our understanding of ecological *praxis*, including the implications for existing understanding of autonomy and agency. In this respect we will need to map out not only possibilities for exercising agency but also constraints imposed by contemporary political-economic media. Like Marx we should consider autonomy and the possibilities for removing the distortions resulting from modern forms of existence.

The central problem of a radical ecological *praxis* is to set out for this historical era the conditions under which humans and other nonhuman entities might realize their 'species-being'. Its moral/ethical core is thus responsible action, which may involve reformulating foundational myths and knowledges, and constructing institutions and inventing technologies which work with nature rather treating it as instrumental backdrop. It will also entail reconfiguring the debased ideals of the Enlightenment within the much broader context of ecological sustainability, for it has been observed that: "Emancipation cannot be thought outside of a link through habitat" (Serres, cited in Conley, 1997, 65). The principle objective of such a radical *praxis* will be to lighten the impact of human communities on the planet by inventing new ways of dwelling (perhaps resurrecting old ones or reevaluating existing ones), which will take the form of learning to live sustainably.

A related objective will to be to throw off the dominations and oppressions/burdens which prevent humans from exercising their capacities and thus realizing their humanness. As Crocker (1990, 161) remarks: "*Praxis* occurs if and only if we engage in activity that realizes our highest capacities. Among these capacities are intentionality, self-determination, creativity, solidarity and rationality". Marx delineated similar human capacities towards which practical action should be oriented with the purpose of overcoming constraints on their flourishing. These include the capacities for creative self-development, control of one's environment, and loving and equal relations with one's fellow humans. A radical ecological *praxis* would therefore address questions of human capacity in the context of the flourishing of all life forms.

The pre-conditions for responsible action should also constitute a realm of concern. I argue that a precondition for sustainable flourishing is a society with the capacity for learning to live sustainably and, further, that ecological sustainability and civic competence cannot be pursued independently. A truly sustainable path, as David Orr (1992, 1, 2) observes: "requires a rejuvenation of civic culture and the rise of an ecologically literate and ecologically competent citizenry who understand global issues, but who also know how to live well in their places". Further, he contends: "environmental degradation and the decay of our concept of citizenship occurred simultaneously and as mutally reinforcing ends".

5.2: Praxis: Theoretical Background

If we accept the ramifications of the ecological critique, we need to ask ourselves: What should we do? How can we proceed? These are largely political and ethical questions; they are questions of *praxis*. Bernstein (1971, xi) makes the point that *praxis* is a concept that, at certain particular junctures in western thought, has had the capacity to focus thinking about a particular cluster of issues and problems confronting society. For this reason it is particularly apposite in this era of seemingly interlinked social, political, economic and ecological crises.

To understand *praxis* we should refer to the two theorists who have had most influence on the concept, Aristotle and Marx. For the former, *praxis* referred to "the disciplines and activities predominant in man's ethical and political life" (Bernstein, 1971, x). The term is not to be interpretted as "practice", which more correctly refers to the practical/material things of life. The disciplines of Aristotelian *praxis* are based on knowledge and understanding (not technical know-how) and practical wisdom. As the object of *praxis* is living well, it contains a large component of virtue. In the case of the Greek philosopher, faced with issues involving the political organization of society, *praxis* represented "that form of truly human activity manifested in the life of the polis" (Bernstein, 1971, x).

In modern times Marx is the theorist most responsible for developing a comprehensive understanding of *praxis*. He enlarged upon and extended Aristotelian *praxis* and, although these days Marxist thought is under a cloud, Marx's insights into the workings of the capitalist political economy have maintained their resonance and are relevant for a *praxis* of ecological crisis. Indeed, Hay (1992, 229-231) argues that, although there are some aspects of Marxist thought that greens should ignore, an effective green *praxis* mandates the incorporation of Marxist perspectives; namely Marxism's insights into the political economy of capitalist production and its appreciation of the importance of structure in social/historical change. Thus, theorizing and writing at a time when the disbenefits of capitalism were becoming increasingly manifest (the first of capitalism's great depressions occurred in 1848), Marx theorized *praxis* both as human productive activity and human alienation, as a means of overcoming the contradictions of capitalist production and therefore of the alienation resulting from it in order to build a truly humanistic society where man could reappropriate his own essence, his true 'species-life'.

Marx's understandings of *praxis* and subsequent developments of the paradigm have profound implications for any society where crisis is generalized throughout all the spheres of life. There are a number of saliencies in Marxist *praxis* for the project of this thesis of outlining a radical eco*praxis*. These are principally to be had in the different understandings of *praxis* that can be distinguished in Marx's writings. One sense in which he uses the term is to define human productive activity. Thus a man's nature is determined by what he does, his *praxis*, and "his products are concrete embodiments of his activity" (Bernstein, 1971, 44). Alienation results when man has no control over the products of his labour and he is unable to express his particular potentialities or ideal nature, with the result that he is dehumanized by the products of his activity. Alienation, however, is not a universal human condition. It is specific to a particular social system, capitalist political economy. Thus *praxis*, in its present historical form, is alienating activity.

For Marx the key to overcoming alienation is the reform of consciousness through some form of criticism. As relentless activity, criticism is also a defining moment of *praxis*. It is not, however, a utopian enterprise; it is concerned with understanding present institutions and the contradictions inherent in them through a correct theoretical analysis rather than with condemnation or speculation about the future. The measure of the radical criticism of social reality is its capacity to bring to self-consciousness genuine human problems. To do so it must reveal a critical understanding of what people are suffering.

One of the most significant aspects of Marx's theorizing about *praxis* is the revelation that the various social forms taken by *praxis* are historically contingent. Thus capitalist political economy is simply one historical tendency, one of the forms that human *praxis* has taken. By interpreting political economy as a "congealed" form of *praxis*, a crystallized form of human activity, Marx enables us to envisage other possibilities and returns to the alienated a sense of agency. He raises the possibility of pursuing other futures. But to achieve any real possibility of humanity mastering its destiny, what is required is a critical understanding of the forces of capitalism (Bernstein, 1971, 58). Marx interprets capitalism as simply the culmination of the progressive separation of humans from the rest of nature throughout the history of western societies. He anticipates that with the passing of capitalism what will be possible is the production of man's "totality", "his needs, capacities, enjoyments, productive powers" (Marx, 1964, 84-85).

He bases this conclusion on his analysis of capitalist political economy as a social system which stunts the development of human capacities and renders human nature unidimensional. The implication of this insight is considerable, for the development of human cognitive abilities is then seen to bear a direct relationship to the prevailing social reality. Marx was attempting a radical transformation in consciousness and therefore in the social *praxis* of capitalism, for he believed that the only hope for a "humanized world", in which human potentiality could be fully actualized, is through revolutionary *praxis*. Thus *praxis* for Marx also signified a revolutionary project.

In addition, it is through *praxis* as critical understanding that we can discover the nature of true human potentiality. Here Marx's view parallels the Aristotelian view "that it is only by understanding what man is - his actuality - that one can appreciate what he can become - his potentiality" (Bernstein, 1971, 70). Marx's advance was to comprehend that potentiality changes as actuality changes, that is, that human potentiality is grounded in history. It is as a result of human *praxis* that new potentialities emerge and thus in *praxis* as critical understanding resides the possibility of agency and autonomy.

It is clear that the *praxis* paradigm can again be brought to bear on the seemingly insurmountable problems of our age, an assertion which will be clarified as I proceed with a discussion of twentieth century contributions and their significance for understanding the unidimensionality of modern humanity. In Chapter 1.9, it was argued that modern society has developed an assemblage of institutions and organizational forms which allow responsibility to be evaded. Modern technology, it was reasoned, constitutes one of the principle sources of estrangement from the moral order. In a related vein, Habermas (1974) has illuminated the implications for *praxis* of a science which has become a technological force, where the ends of technology have become the ends of society. The core of Habermas's argumentation is that thought and action are rationally related but in modern society the purposive/instrumental elements of reason have become divorced from commitment with the result that technology exerts a controlling influence over the ends of society while science as reason has lost the capacity to address questions of practical importance. Reason is thus appropriated to productive ends and, so debased, becomes understood as "decision" (Habermas, 1974, 263). The danger in this process of scientification is that citizens lose the capacity to "attain a rational consensus ... concerning the practical control of their

destiny" (Habermas, 1974, 255) and, I would argue, society collectively loses its capacity for responsible action.

For Habermas then, alienation resides in society's dissolution by technological reason into its particular parts and the consequent loss of its rational capacity. To act as "coherent total consciousness", society needs "politically enlightened", responsible citizens, a foundation which becomes an impossibility in a technologically controlled society, whose members are ironically at once captive of it and yet alienated from it:

> The paradox of this state of affairs will, of course, only be recognized by a theory oriented towards *praxis*. ... The more the growth and change of society are determined by the most extreme rationality of processes of research, subject to a division of labour, the less rooted is this civilization, now rendered scientific, in the knowledge and conscience of its citizens (Habermas, 1974, 256).

And the less the chance of responsible action being undertaken.

Overcoming the debasement of reason and the corresponding burgeoning of irresponsibility can only be achieved by a change in the state of consciousness, accomplished by the "penetrating ideas of persistent critique" (Habermas, 1974, 256). Just as Enlightenment thinkers perceived reason as the antidote to ignorance and prejudice and their manifestations, religious intolerance, dogmatism and despotism, so for Habermas reason is the remedy for the false consciousness of this "congealed society" (Habermas, 1974, 262). However, where Habermas differs is that this is a rationality reconnected to commitment and grounded in an understanding of nature and in practical experience. It is reasoned thought reconnected to responsible action as *praxis*. It is the basis for actualizing what Habermas terms "adult autonomy".

Integral to progress towards adult autonomy is the cognitive function of critical reflection, from which industrial society, wherein the technical aspects of knowledge dominate science, protects itself by appropriating the resources of reason and subordinates it to production. For a civilization where *praxis* is thus technologically dominated, the outcome can only be insanity, since, Habermas maintains, "being devoid of the interconnection between theory and *praxis* ... [it is] threatened by the splitting of its consciousness and by the splitting of its human beings into two classes - the social engineers and the inmates of closed institutions" (Habermas, 1974, 282).

The essential difference between Marx and Habermas with respect to the place of technology in social *praxis* is that, while Marx envisaged technology as the means to surmount the alienating impediments to autonomy, Habermas clearly lays the blame on technological reason as the single alienating force of modern society. In this "crisis of rationality", where science and technology have become sanctified into another form of dogmatism (Orr, 1992, 12-13), *praxis* must necessarily be reconceptualized apart from technological reason in order to retrieve some coherence and unity in the world. However, Habermas retains a modern faith in rationality, reflecting that "science as a productive force can work in a salutary way when it is suffused by science as an emancipatory force" (Habermas, 1974, 281).

Subsequent practice of Marxism has revealed its *praxis* to be a double-edged sword; it has the potential both for emancipation and for repression. Marx's shortcoming, according to Bernstein (1971, 308), was his failure to provide norms of criticism because he lacked "a firm understanding of what ought to be the norms of critical inquiry by which it can continually refine and correct itself". And this despite the fact that Marx himself engaged in continuous self-criticism. What was attractive about Marxism was also its undoing: its appearing to provide the final explanation for the world as it is and should be, a totality. Bernstein finds in the pragmatists Pierce and Dewey, and their understanding of science and scientific inquiry, the possibility of transcending the dogmatising inclinations of Marxist *praxis*. For Pierce the essence of reasoning lies in constant self-criticism within a social context, a community of inquirers. Thus one continuously essays to distinguish the real from the unreal, the true from the false. Moreover, because for the pragmatists all truths are infinitely revisable, the search for absolute certainty, whose only possible outcome can be dogmatism, is unsustainable. In their conceptualization of scientific reason they furnished one of the norms of critical inquiry lacking in Marx, that no position has any final or fundamental hold on the truth, thereby enabling a more adequate account of human cognitive and practical activity, while restoring the sense of human agency denied by the structuralist account. In addressing this deficiency, the pragmatists enriched and enlarged the *praxis* paradigm, demonstrating that norms of critique are integral to *praxis* and therefore progress towards the "full ideal of free human activity" (Bernstein, 1971, 316).

In the postwar period Cornelius Castoriadis (1987) has also sought to augment the paradigm but at the same time to transcend some of the deficiencies of Marxist *praxis*. It was his intention not to dismiss the tendency for totality inherent in *praxis* but rather to reinterpret totality (here the social totality) not as the essence

of reality as it is or will be, but as "an *open-ended unity in the process of making itself*" (Castoriadis, 1987, 89). *Praxis* must take the totality into consideration but is not obliged to reach a completion. This totality is constantly engaged in taking itself into consideration, that is, it is engaged in ongoing self-reflection. Because this *praxis* "begins with the explicit acknowledgement of the open character of its object" (Castoriadis, 1987, 89), it can only ever have a partial grasp of its object. However, this is not a deficiency, because such a *praxis* sets out to avoid the blueprints or detailed models which underpin the totalizing discourses which have so far plagued modernity. Nor does this revolutionary *praxis* have to:

> provide an absolute guarantee that this society could solve all the problems that could ever arise. It is enough that it show that there is nothing inconsistent in what it proposes and that, as far as can be seen, its realization would greatly increase society's capacity to face up to its own problems (Castoriadis, 1987, 90).

Just as Marx saw *praxis* as the revolutionary social project of securing individual and collective autonomy, so too for Castoriadis is autonomy at the heart of the contemporary political and social problem (Castoriadis, 1987, 107), for the conditions of alienation can be found only in the social domain. Thus alienation does not reside simply in workers' incapacity to control the products of their labours, but rather it originates in the "oppressive structures" of modern society and the "collective anonymity" that they generate. It is heteronomous, not autonomous, rule that originates in "the impersonal nature of the 'economic mechanisms of the market' or in the 'rationality of the Plan', of the law of a few presented as the law as such" (Castoriadis, 1987, 109). Castoriadis concludes that the institutional frameworks of modern society and their supporting ideologies and power structures render futile the pursuit of individual autonomy so that not only are producers (read:workers) alienated but also the members of the capitalist class themselves. The essence of contemporary alienation then is that it is characterized by a situation in which institutions become autonomous, no longer serving the needs for which they were instituted. They develop their own inertia and their own logic: "The apparent plain truths are turned upside-down: what could have been seen 'at the start' as an ensemble of institutions in the service of society becomes a society in the service of institutions" (Castoriadis, 1987, 110).

The contemporary revolutionary project has its roots in "the *crisis* of established society" (Castoriadis, 1987, 95) or, more specifically, in the internal contradictions of capitalist society. Just as for Habermas overcoming alienation

constitutes a project in which rationality is reconnected to responsible action in the service of actualizing autonomy, so for Castoriadis *praxis* is a creative process in which understanding or clarifying the world as it is (here exposing the irrationalities of capitalism) is a necessary precondition for changing it. Contemporary *praxis* should attempt to clarify the institutional basis of alienation, investigating why institutions suffer from inertia and become ends in themselves. It should also concern itself with the institutional basis of irresponsibility and the impediments to autonomous and responsible action.

5.3: Ecopraxis

Having outlined a refurbished *praxis* paradigm, what remains to be done is to bring some of its insights to bear on the ecological crisis of the late twentieth century. Such a radical ecopraxis, as I see it, should furnish signposts for proceeding further (I forebear to use the word 'progress' as that is now too heavily stigmatised and in need of reformation); it should indicate possible pitfalls; it should provide a critical understanding of the present crises, including the identification of deficiencies to be addressed; it should define possible norms for action; and it should identify constraints on responsible action[61]. A radical ecopraxis would also address questions of autonomy and agency.

It is now clear that contemporary problems of ecology and society are interlinked and have their roots in the production paradigm, which is underpinned by ideologies of economic growth and mass consumption (Kassiola, 1990). The presently dominant mode of production, capitalism, which, the Marxist geographers, Smith (1990), Harvey (1989) and others have demonstrated, is prone to contradiction and therefore crisis, is not, as Marx argued, an eternal social form. It is these contradictions which must be elucidated and it is in the crises that they produce that we may look for sites of institutional innovation (Dryzek, 1992; but see also Dryzek, 1996b). Moreover, it is in a critical understanding of present-day actualities, the contradictions and associated crises of capitalism, that one must search for possibilities of agency. Castoriadis (1987, 79) divines the conditions for action at the intersection of the rational and the irrational. In order to understand constraints on agency, Castoriadis's autonomous institutions and their supporting ideologies and power structures must be critically deconstructed. Moreover, responsible action

[61]Similarly, Eckersley (1988, 59) establishes the path of desirable social change as one which develops an "adequate theoretical understanding of the historical development" of possible agents of change, of constraining institutional structures, and of patterns of thought and practice resistant to ecological ideas and goals.

would be premised on the understanding that the loss of human agency cannot be understood apart from the loss of habitat (Conley, 1997, 199). It follows then that the realization of human potentiality cannot be pursued in isolation from the actualization of the potentiality of all other entities, human and nonhuman. Consequently, it may be said that the goal of a radical ecopraxis mirrors contemporary crises of social/economic sustainability (quality of life) and ecological sustainability (ecological integrity).

5.3.1: Ecotopia as Regulative Ideal

Contemporary political theorists are averse to utopian thinking since the failure of the Enlightenment's "rationalistic visions" (Benhabib, 1992, 229), fearful of totalizing grand narratives, the actuality of which has tended to favour undemocratic and authoritarian practices in the present for some anticipated ideal in the future. However, the concept of utopia retains its value as a "regulative principle of hope" (Benhabib, 1992, 229) and it is as a normative ideal that the principles of ecology can be used to outline possible ecotopias. The practice of earlier utopian visions can but serve to remind us of the dangers of an uncritical acceptance of such principles.

Although utopian thinking has become tarnished, as long as what is to come is perceived to be better than that which already exists, there will be a need for utopian thinking. Benhabib (1992, 229) interprets such thinking as a "practical-moral imperative". She avers: "Without such a regulative principle of hope, not only morality but also radical transformation is unthinkable". Yet, while conceding the concerns of opponents of utopias, she maintains that the only way to deal with problems of undemocratic-authoritarian practices in the name of future ideals is to locate social transformation in "the normative principles of democratic action and organization in the present". Of the need for political imagination, Ruth Levitas (1993) also argues that utopias are politically important, since, as a vision of a good society in the future, utopia may act as an agent of social change. And conversely: "The absence of utopian thinking may then be construed as a problem because it paralyses political action or prevents it from cohering into a force capable of effecting fundamental change" (Levitas, 1993, 257).

If the ecological principles inhering in the ecotopian vision – peace and non-violence, democratic participation, ecology and feminism – are to constitute the kind of regulative ideal that Benhabib and Levitas argue is essential to transformative thought and action (*praxis*), environmentalists must take steps to ensure that they

avoid the failings of earlier utopian visions. If sustainability is accepted as the goal of ecopraxis (at least, for the forseeable future), the experience of utopian thinking in the modern era suggests a number of guidelines to which thought and action should adhere. Firstly, the complexity and extent of emerging interdependencies indicates that goals for future sustainable societies must be far less grandiose than the material plenty ideals of modern societies, for which the economic growth paradigm has been particularly damaging. Re-adopting and re-orienting the early modern goal of 'improvement' to mean 'a better quality of life' would be a more appropriate and more modest goal in view of the global inequalities alluded to previously. Indeed, according to Wackernagel and Rees (1996), a satisfactory quality of life is one of the two poles of tension inherent in sustainability planning; the other is ecological sustainability or long-term ecological security. The tendency in modern societies has been to interpret the former as material wellbeing and hence for material welfare to conflict with the latter. The goal of sustainability is to reinterpret 'quality of life' and therefore to overcome the antagonism between socioeconomic sustainability as presently construed and ecological security.

In view of the unidimensionality of modern life, it is clear that, if improving quality of life is a goal of sustainability, its meaning must be enlarged to capture the full range of human potentiality. The human needs frameworks of Abraham Maslow (1968) and Manfred Max-Neef (1985) can be utilized to inform policy-making in this regard. What is also clear is that sustainability planning must also attempt to overcome the tendency in attending to quality of life concerns in the present to discount the needs of future generations, thus compromising long-term ecological integrity.

Secondly, given the over-confidence unleashed by the Cartesian *cogito* and the obvious threats from the technological optimism thus generated, hopes for the future must be tempered by a sense of the immense responsibility that its technological capabilities bestow on the human species (Jonas, 1984, 201). With the acceptance of ecological limits: "Promethean immodesty - and utopia is *the* immodest goal par excellence - must yield to the modesty of goals that we and nature can afford". Indeed, Jonas (1984, 1) makes the point that to preserve the natural environment and the human species is not so much a utopian goal but rather a "not so very modest ... task of responsibility".

A third norm which might apply to an ecological ideal involves avoiding the dangers of its uncritical acceptance so that it becomes ultimately an unchallengeable

article of faith. Proposals with an ecoauthoritarian bias are prone to the same failing as earlier utopias wherein citizens have been willing to surrender hardwon democratic privileges in the name of some postulated greater good, driven by an uncritical faith in its rightness. Indeed, Eckersley (1988, 59) argues that the cardinal principle of ecopraxis resides in the "need to maintain consistency between ends and means".

At the root of this tendency to be swayed by utopian blueprints is what Saul (1997, 31) calls a "Western weakness for ideology", wherein the illusion of reality is underpinned by "highly sophisticated rational constructs". Ideology creates illusions which tend to unbalance the order of things. This congenital disequilibrium of modern life is one of the reasons why the future is always more attractive than the present. It is the reason why the future is idealized and the present regarded as incomplete or unfulfilled. Freeing ourselves from ideology, Saul says, will enable humankind to make more reasonable approximations of reality and therefore define more reasonable, perhaps more modest, aspirations and hopes. The problem with ideologies is that they purport to provide the ultimate answers to the perpetual conditions of existence and the certainty which comes with having those answers. As uncertainty is the paramount condition of human existence, this can only be an illusion. A utopian ideal based on Socratic doubt would be more realistic about possible human achievements and it would help check the kind of system runaway produced by the maximizing strategies which are an inevitable consequence of ideological adherence. It would also counteract the tendency, when ideological promises remain unfulfilled, to administer more of the same medicine on the basis that the conditions for achievement are yet to be satisfied. The contemporary fixation with free market ideology ignores the fact that markets are simply incapable of supplying some social and environmental goods while privatization and competition, its mates in the neoliberal stable, can only serve to deepen prevailing ecological and social crises.

Having accepted that the perennial human condition is uncertainty, any regulative ideal proposed for the future conduct of human affairs should also be alert to the inevitable contradictions and paradoxes of human existence. Any side-effects or externalities which manifest during the course of any programme would then be seen for what they truly are, contradictions inherent in the programme or its theoretical framework rather than problems resulting from deficiencies in its application and therefore in need of renewed vigour in progressing the programme as is the case with ideological fixations. It is appropriate to call attention to the

distinctly salvationist overtones in some of the supposedly secular thought frameworks which presently guide modern societies.

Relinquishing the search for certainty of existence and for human perfection also means that we can avoid a further modern shortcoming, the rationalist's belief that, when received ideas and practices become contradictory and thus ineffectual, the decks of tradition should be cleared, their constraints transcended and a new beginning made. The French Revolution is the example *par excellence* of the 'clean slate' approach to social transformation. The tendency for social transformation processes in modern societies to operate on the 'clean slate' principle has been attributed by Stephen Toulmin (1990, 178) to the rationalist philosophies of Descartes and Locke, which:

> had no room for given ideas and practices to *change continuously* into other different ideas or practices. Once one questioned the claims of any social or intellectual system, the only thing left to do was to raze it, and construct another different system in its place.

However the hope of cutting oneself off from inherited traditions and beginning anew has proved to be an illusion. It is now accepted that whatever practical and intellectual purposes we pursue, they are culturally and historically conditioned[62]:

> All we can be called upon to do is to take a start from where we are, at the time we are there: i.e., to make discriminating and critical use of the ideas available to us in our current local situation, and the evidence of our experience, as this is read in terms of those ideas. There is no way of cutting ourselves free of our conceptual inheritance: all we are required to do is to use our experience critically and discriminatingly, refining and improving our inherited ideas, and determining more exactly the limits of their scope (Toulmin, 1990, 179).

The danger for radical ecologists is that in their perception of the urgency of the ecological crisis, given increasing rates of biodiversity loss, increasing signs of climatic change, and increasing social injustice, they may ignore the lessons of the revolutionary experience and embrace more abruptly transformative and authoritarian solutions. What is required of this historical era is an ecopraxis with the intellectual and practical space where the best of our ideas and practices can be refined and

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[62]See also Castoriadis (1987, 113) on the inevitability of psychosis in subjects and societies which cut themselves off from their cultural and historical ground.

adapted to the imperatives of our age, the need to protect diversity and adaptability (Toulmin, 1990, 183).

To avoid the charge of the totalizing blueprint (Castoriadis, 1987, 89), a radical ecopraxis cannot countenance any defined endpoints for its projects. It can only pursue movements towards its ideals. In the broadest terms these may be envisaged as a radical shift to ecological consciousness among a threshold proportion of human populations and the emergence of institutional arrangements which encourage ecologically responsible values and practices. Moreover, the ideal and its intrinsic worth and rightness should be subject to ongoing internal scrutiny (Jonas, 1984, 191), grounded in the concrete realities of human experience and possibility. A modest scepticism, such as advocated by the Renaissance humanists, is open to other possibilities and modest about the limits of human cognitive and practical capacity. A humanist account would also allow that there will be diverse means of pursuing ecological ideals and even a diversity of goals. It would avoid depicting concrete forms of life but rather it would seek to "indicate the necessary conditions, which would have to be fulfilled in order for emancipatory life forms to emerge - whatever they may be" (Habermas, 1992b, 145).

A radical ecopraxis is thus grounded in human actuality. The task of critical intellectual activity is to illuminate the present - its discourses and practices - and to furnish a critical understanding of what stands in the way of self-creation. As it was for Marx, radical ecocriticism should bring to self-consciousness, and therefore render transparent, those institutional arrangements of liberal capitalism which are exploitative and oppressive. It is only then that possibilities for sustainability through practical-critical activity can be realized. Indeed, according to Levitas (1993, 264), it is only "when we have analyses of the present which identify possible points of intervention, paths and agents of change" that we will be in a position to map out the future. However, this avenue of social change is not as straightforward as it seems. Levitas suggests that the present seeming failure of the utopian imagination and apparent inability to see past the present is the consequence of an increasingly complex social and economic structure and its attendant fragmentation which hinders the identification of possible agents and paths of social transformation. Late capitalism is characterized by diversified sites of oppression which are easily identified, but what is not so readily defined are "points of intervention in the system which might lead to transformation or groups of people capable of making those interventions" (Levitas, 1993, 264). This latter difficulty has also been canvassed by Dobson (1996), who, with serious reservations, divines in the increasing number of

people marginalized from consumption, the post-industrial proletariat so-called, a possible revolutionary political subject. Dobson concedes that there are serious difficulties in diverting this group from the consumption paradigm, not the least of which is persuading the marginalized that their problems are structural and that current production and consumption processes "actually reproduce, rather than alleviate, its marginalization" (Dobson, 1996, 163). The role of radical greens in this case is to make the marginalized class aware that its interests lie in a different kind of society and not in remaining wedded to the present disabling schema, "because the limits imposed by the Earth on the production process and the accumulation of capital make it impossible for this marginalized class ever to have access to the system's material benefits" (Dobson, 1996, 163). However, even if this change in consciousness could be effected, there remains the problem, for greens at least, of conceiving of this group as a revolutionary subject. This is also a difficulty for an ecopraxis which is explicitly defined by its opposition to the clean slate approach of the revolutionary project.

Notwithstanding these problems, a radical ecopraxis should embody as a defining objective an improved capacity for society to both confront and address the problems generated by and reflected in ecological crises. But before the objectives of a transformative project and its agents and possible paths can be determined, what is needed is an understanding of societal constraints and how they restrict agency, namely, institutional biases against sustainability and deficiencies of the self. Additionally, in order to map trajectories, we must be able to identify potential sites of political innovation. What is therefore needed is a political economy account of sustainability, which can assist in the articulation of such biases against responsible action for sustainability as well as identifying possibilities for transformation.

5.4: Towards a Political Economy of Sustainability

A political economy approach to sustainability is likely to be the most conducive to the purposes outlined above because it encompasses a broad range of perspectives - political, economic and social/cultural - giving primacy to the social production of existence and hence to the social (rather than technical) foundations of ecological problems. It also recognizes the dynamic nature of society, emphasizing processes of change and transformation and, because it captures the inevitability of inequalities under a capitalist system, it can help to explain the inter- and intragenerational inequities which are a primary concern of sustainability theorising. It can also grasp the import of power and of ideology in the maldistribution of

environmental goods and bads. In the context of ecological crises, a political economy of sustainability may then be defined as the study of the processes and structures (technologies, institutions, values and patterns of economic and social development) associated with and emerging from peoples' transformations of their biophysical and sociocultural environments (Gare, 1995, 157). The following discussion canvasses questions both of structure and agency.

5.4.1: Biases against Sustainability

I have previously argued that conservative approaches to sustainable development, ecological modernization processes, are unlikely to progress societal restructuring to the extent that is necessary for securing long-term sustainability. In view of the growing gap between what appears to be achievable and what needs to be achieved, there is required an understanding of the impediments to more equitable and liveable existences, in particular, why obviously unsustainable development paths continue to persist. In this respect we should seek to understand how systems, institutions and individuals become locked into entrenched and hence unsustainable paths of development, practices and behaviours.

Richard Norgaard (1992; 1994) has developed a theory of coevolution to explain why modern economic systems are unsustainable and why they persist in the face of increasing externality effects. His theory catches the interrelatedness of values, knowledges, social organization, technologies and ecosystems and explains why the sustainability of both social and natural systems is dependent on their concurrent evolution. He argues that the growthist model of development is unsustainable because modern economies have developed as closed systems in ignorance of the interdependencies of social and natural systems. The separate development of social and natural systems in modern times is attributed to the switch to hydrocarbons, the 'fossil fuel subsidy' or, put another way, in the shift from flow (wind, water and sun) to stock materials (fossil fuels and minerals/metals).

> The era of hydrocarbons drove a wedge between the evolution of social and ecological systems. ... Our value system, knowledge system, social organization and technologies coevolved to fit the opportunities which the exploitation of fossil fuel provided. Our social systems reflect these medium-term opportunities rather than the long-run opportunities of coevolutionary development with the resources of the global system (Norgaard, 1994, 81; see also Dietz and van der Straaten, 1993).

A coevolutionary interpretation of sustainability places value on the maintenance and enhancement of the overall diversity and productivity of all these systems, while recognizing their dynamism and interrelatedness. From this standpoint:

> development has been unsustainable, not simply because the use of hydrocarbons has been destroying the environment, but because there has been a cultural implosion. Value systems have been collapsing. Knowledge has been reduced to western understanding. Social organization and technologies have become increasingly the same around the world. The cultural implosion and environmental transformation have been closely interconnected. The switch to hydrocarbons allowed cultures to stop coevolving with their unique environments and adapt the values, knowledge, technologies and organization of the west (Norgaard, 1994, 82).

The exploitation of fossil fuels has endowed the complex economic/ technological/bureaucratic institutional apparatus which developed as a result with a quality of robustness which enables it to persist despite obvious threats from social and ecological dysfunction. To account for the tendency of technological systems to become locked into particular development paths, Geoffrey Hodgson (1993, 205, 256) describes how the notion of chreodic development (*chre*, meaning fated or necessary, and *hodos*, meaning a path) has been borrowed from evolutionary biology and used as a model for technological development in an industrial economy. Briefly a chreod is a relatively stable trajectory of change, its stability achieved by constant incremental change. Even though environmental influences may operate to dislodge the system from its trajectory, the very stability of the system (resulting in part from its hierarchical control sequences) will return the system to its ordained path. Thus once systems of technology, which are characterized by hierarchical control mechanisms, become established, it is difficult to switch to other possibly more viable or sustainable technologies. By way of example, early motor vehicles were designed to run on steam, electricity or petrol. We could imagine that an entirely different kind of society would have been the consequence if steam-power had prevailed. Because initial conditions can be instrumental in influencing the particular path that development takes, the implication is that there is a case for intervention either to establish or change the contours of development in its early stages (Hodgson, 1993, 207).

The nature of chreodic development also bears on the possibilities for social transformation. Chreodic systems are transformed by constant and incremental

innovation occurring at the micro level while the macro level is characterised by rigidity and invariance. This observation may explain why, in response to ecological problems, changes have been observed occurring at the personal level - the adoption of green consumption habits, recycling programmes and energy efficiency measures, but at the level of government and business, economic growth remains the primary goal. The chreodic model suggests that redirection of the goals of western societies towards more sustainable ends is likely to occur only through major perturbation or redirection of the system and, concomitantly, that the incremental change characteristic of polyarchic liberal capitalism is unlikely to produce sustainable modes of living. It also explains why particular, suboptimal development paths have the capacity to persist in spite of obvious disturbances in the external environment.

However, the stability of the chreod cannot be relied on forever:

> [D]evelopment along a stable path can sometimes lead to catastrophe. Institutions change, and even gradual change can eventually put such a strain on a system that there can be outbreaks of conflict or crisis, leading to a radical change in actions and attitudes (Hodgson, 1993, 258).

It is possible therefore to envisage long periods of stability in values and habits, but eventually the very ossification of stable systems can lead to sudden and rapid change prompted either by internal or external influences. By understanding system change in this way, we can conclude that, although small marginal adjustments are generally ineffective, there may be room for planned transition to more optimal or sustainable development paths - although Hodgson (1993, 259) comments that later interventions may demand considerable investment in resources to effect the appropriate realignment. Prospects for a painless diversion of the presently dominant economic growth paradigm through ecological modernization policies are not that encouraging.

The situation in which institutions become autonomous has previously been mentioned. The perpetuation of unsustainable institutions has much to do with the reinforcement of routinized behaviour. When certain behaviours become routinized, institutions (described by Thorsten Veblen as 'outgrowths of habit' - cited in Hodgson, 1993, 131), like systems, can become locked into a particular level of cultural development, which through "cumulative reinforcement", may persist into an era of changed material conditions. Lock-in at this level is known as 'institutional inertia'. The mechanism, which appears to play a large role in perpetuating unsustainable institutions and the values and routinized behaviours sustaining them,

is positive feedback. Simply put, positive feedback is an undesirable tendency because it involves deviation-enhancing input into a system, thus reinforcing negative processes and behaviours. Dryzek (1987) has elucidated the positive feedback effects operating within market economies - the profit motive and continuous growth imperative - which operate to promote unsustainable economic growth, while other aspects of markets - interest rates, future discounting and market morality - weaken desirable negative feedback.

Under such conditions, possibilities for institutional change may present at the intersection where friction occurs between the habits of thought generated by an earlier set of cultural conditions and the habits emanating from a more recent suite of cultural conditions. The contemporary ecological crisis manifests as just such a conflict where the habits of thought, practices and entrenched value systems characteristic of an optimistic economic growth paradigm collide with the more sober ecological values and realistic expectations derived from a changed understanding of the culture/nature relationship. The institutions of neoclassical economics - free markets and private property rights - and the values that they embody appear directly antithetic to the values contained in an ecological paradigm. Given the incompatibility of value systems, polarization of communities (over the logging of old growth forests, for example) can probably be resolved only by the emergence of economies which are co-operatively rather than individualistically based (Kemmis, 1990, 104-105), a movement which would constitute a radical challenge to neoclassical economic understanding.

Impediments to individually sustainable existences have been identified as "social traps" (Costanza, 1991, 332-333; Orr, 1992, 5-6). Individuals may become trapped into unsustainable or damaging practices when local incentives reward what is individually rational behaviour in the short-term but collectively irrational in the long-term. The "Tragedy of the Commons" is the pre-eminent example here, but other addictions, such as drug abuse, overuse of pesticides, and the ongoing use of motor vehicles, are also indicative of individual unsustainability. Robert Costanza (1991) posits the origin of social traps in the bifurcation of human behaviours from long-term natural constraints through the development of a tool-using capability consequent on an expanded brain capacity. This adaptation enables humans to at least partly ignore the constraints of sustainability but also makes them susceptible to social traps (Costanza, 1991, 332). He contends that conventional economic models of human behaviour are inadequate under conditions of uncertainty and complexity and that more realistic policy design would seek to make individual or local goals

and incentives consistent with the long-term, collective goals of sustainability. It must be said, however, that conventional economics does have the capacity to modify consumption behaviour for interim environmental improvements, such as incentives for improving fuel efficiency or using less environmentally degrading fuel sources, through upfront payments for the use of resources or incentives to recycle. However, the degree of consumption reduction and radical redistribution of resources envisaged as sustainability goals is beyond its theoretical resources. The point at issue is to be able to recognize social traps for their unsustainability and then to avoid them in the future, and, most importantly, that the radical individualism which is at the root of social traps is inimical to the goals of long-term social and ecological viability.

5.4.2: Transformative Possibilities

In its radical critique of the sustainability of existing institutions, a political economy of sustainability should provide indications of possible points of interdiction. To this end I draw upon existing theories of crisis and containment of crisis in capitalist modes of production on the basis of insights furnished by Anthony Giddens' (1984) theory of the structuration of society. Gidden's theory is a theory of agency which circumvents the structural determinism of historical materialism without allowing unqualified freedom to the human agent. In the context of social transformation, it is the potential which he locates in contradiction and crisis that is of most interest.

According to the theory, all human agents are confronted with all manner of constraints in the exercise of their agency. Even so, all constraints are complemented by enabling conditions. In commenting on the theory, Cohen (1989, 214-215) explains the relationship thus:

> No matter how severe constraints may be they always establish opportunities for some more or less extensive range of activities which enables actors to intervene in social life. ... All constraints must be complemented by enablements in order for the constitution of life to occur.

The possibilities for action always involve both opportunities which are foreclosed or obstructed and opportunities which enable other forms of activity and outcomes to be produced. It is the contradiction between these two types of possibilities which establishes the conditions for social change. Where Giddens' account differs from

Marx's is that he recognizes that contradiction can underlie both progressive and retrograde movements for change (Cohen, 1989, 259).

If contradiction is perceived as the relation between incompatible and irreconcilable sets of conditions, then tension is unavoidable. Possibilities for resolving such tension include, firstly, one set of conditions taking over the other and the abolition of the latter; secondly, accommodation between contradictory tensions and stabilization of societal systems for greater or lesser periods of time; but thirdly, where contradictory tensions cannot be reconciled, destabilization of societal systems occurs, accompanied by the likelihood of conflict and social change. Where contradictions are structural in origin, inevitably they cannot be reconciled and thus is established the conditions for episodes of social change.

To date, attempts to respond to the contradictory tensions resulting from the advent of the 'conservation imperative' (Dryzek, 1996b) have been largely confined to a compromise trade-off between economic growth and environmental protection with the purpose of maintaining economic growth within environmental limits. However, as I shall argue, confining capital's accommodation to environmental problems to economic restructuring simply amounts to a deferral of the inevitable. Unless fundamental structural imperatives regarding the interdependence of ecosystem and social viability are addressed, radical destabilization of both systems is more than likely, developments for which there is growing evidence (see the contributions to O'Connor, 1994b on this aspect).

5.5: Structural Change in Capitalist Societies

So far I have been concerned to outline in general terms the conditions for social transformation stimulated by contradiction and crisis. I would like now to apply this general understanding of the relationship between crisis and social change to an understanding of the possibilities for social progress towards sustainability latent within capitalist societies. The most important point to be made here is that such societies are inherently crisis-prone. So-called crisis theories (Harvey, 1982; O'Connor, 1973; and Offe, 1984 among others) have identified the origins of contradictory tendencies inherent in capitalist production regimes, namely the tendency to overaccumulate, the tendency to undermine their own social foundations, and a more recently recognized inclination to undermine the biophysical base (Daly and Cobb, 1989). And yet, in spite of such seeming fragility, capitalist systems nevertheless have the capacity to persist. This is the conundrum which has exercised

the attention of the regulation theorists, whose work is useful for understanding the dynamics of change in capitalist societies.

Regulation theory provides a valuable theoretical framework for understanding how a crisis-prone system of production is able to attain and maintain some semblance of order which allows it to function coherently for a period of time. It "provides a conceptual framework for understanding processes of capitalist growth, crisis and reproduction. The approach focuses on relationships ... between the process of accumulation and the ensemble of institutional forms and practices which together comprise the *mode of social regulation* (MSR) [my italics]" (Tickell and Peck, 1995, 359-360). The MSR produces a temporary solution to the crisis tendencies which are inherent in the accumulation process. The postwar coalescence of values and norms, legislative activity and general societal support about the ideology of development is one such temporary MSR or grand compromise (Lipietz, 1992), and one which has been in the process of unravelling since the early 1970s. When systems of accumulation and MSRs are coupled together in a stable fashion for a period of time they are termed *regimes of production.* Being incapable of neutralizing crisis tendencies indefinitely, however, MSRs are eventually subject to "institutional exhaustion" and the compromise collapses, a development which presently manifests in western societies as increasing social disaggregation, political disenchantment and voter volatility. Capitalism, as a mode of production, has been characterized by a succession of such institutional fixes, although the theory does not predict its infinite reproducibility.

The postwar consensus between capital and labour, centring around the maintenance of mass production while protecting labour from exploitation, has been in crisis since around 1973. It may be argued that sustainable development is but the contemporary attempt to work out another mode of social regulation to avert this latest crisis of capitalism.

5.5.1: Regulation for Sustainability

Regulation is a useful framework for understanding social change particularly in this era of sustainability crisis. Several theorists have attempted to link regulation theory to the sustainable development discourse with the aim of progressing understanding of possible sustainability forms. Ian Drummond and Terry Marsden (1995) and David Gibbs (1996) have endeavoured to spell out the sustainability issues in Adam Tickell and Jamie Peck's (1995, 320) reading of the contemporary

crisis of capitalism, namely, that any attempt to construct "a new compromise under a new MSR must involve a central commitment to economic, political, ecological and social sustainability". This reading is also clear about the futility of relying on market-driven solutions prescribed under the influence of neoliberal ideology to furnish the conditions for a sustainable mode of social regulation. Drummond and Marsden explicitly draw a relationship between the unsustainability of the postwar MSR and the current crisis of capitalism, which Tickell and Peck hold, is exemplified and exacerbated by the fixation with neoliberal policies.

Interpreting contemporary regulation regimes in terms of their sustainability, both socioeconomic and ecological, has the effect of problematizing both the object and the nature of regulation. Drummond and Marsden argue for a redefinition of both of these variables in order to transcend particularly unsustainable regimes of accumulation. The revolutionary nature of this proposal suggests that any system of reregulation that simply restricts sustainable development to economic restructuring in order to create new uses for capital, only defers the inevitable crisis of overaccumulation and is nothing more than an extemporization measure. Eventually friction must develop between the modes of social regulation, those institutions which provide support for capital, and those forms of regulation oriented towards system sustainability, such as environmental protection legislation, because the unsustainable assumptions of the former are inconsistent with long-term sustainability goals.

The incorporation of sustainability concerns into the regulation discourse also has the effect of highlighting the true preconditions for capital's viability, which until recently have been taken for granted or, rather, have been narrowly defined as purely economic. The prime imperative of established regulatory regimes is to maintain the value of capital even, it seems, at the expense of undermining the social, ethical and natural conditions of production. The integration of ecological and ethical dimensions, through a concern for the preservation of ecological integrity and for generational justice, into regulation for sustainability, would necessitate the redefinition of both the object and the character of regulation such that these key elements of sustainability would override unsustainable regimes of accumulation. Drummond and Marsden (1995, 58) conclude that the object of regulation "must extend beyond a singular concern for the value of capital. ...[In fact] there may well be a superior logic and some utility in strategies which objectify and facilitate the devalorization of capital". This may involve a parallel valorization of other sources of value or "system currencies".

Because sustainability is a whole-system problem, Drummond and Marsden suggest that such system-wide factors and indicators must be identified in order to understand system behaviour and identify policy options. It is system currencies which act to regulate systems towards normative equilibrium. What must also be identified are factors which militate against sustainable regimes of production, which, at this time, implies ecologically viable forms of development. In order to understand regulating influences within capitalist systems and thereby discern intervention points, these authors draw upon the Dovers and Handmer (1992) model of self-regulation in environmental systems.

In environmental systems the key controlling mechanism is the flow of energy through the system. Understanding energy as a system currency represents a means of transcending the complexity and heterogeneity of ecosystems, which, in spite of these characteristics, have the capacity to proceed towards some normative equilibrium unaided by the purposive actions of any of their constituent parts. If this notion is transferred to capitalist systems of social and economic organization, flows of capital assume the role of system currency, thus furnishing a means of transcending the complexity and uncertainty of these regimes of production. It is "system-wide currencies ... which offer the possibility that complex systems, albeit in a 'grey-box' manner, be understood and purposively managed" (Drummond and Marsden, 1995, 55). In ecosystems the most effective intervention is "at those locations where flows of energy are most concentrated and possessed of the greatest influence on (ie. power over) the overall pattern of system dynamics: either at the level of inputs to the system or in the higher trophic levels of the system". By analogy then, in systems of capital flows, "the key to effective agency lies in understanding interventions as adjustments to flows of capital through the system" (Drummond and Marsden, 1995, 55). Such an approach overcomes one of regulation theory's deficiencies, namely, its failure to account for international capital movements, which, as Drummond and Marsden observe, play a significant role in patterns of uneven development and, as others (for example, Altvater, 1993) maintain, in global environmental degradation.

System currencies may take different forms, however. It is also necessary to delimit and expose those ideologies which act as system-wide currencies in defining perceptions of reality in particular terms conducive to the maintenance of what are now unsustainable modes of social regulation and accumulation. A utilitarian ideology in relation to land, for example, can no longer be countenanced, for it

absolves landholders of responsibility for stewardship of its ecological quality. As the sole value of land is its usefulness, there is no room in this ideological schema for ecological purpose.

However, simply identifying system currencies is an insufficient precondition for effective agency. An understanding of unsustainable practices must also be established, although such possibility resides in defining their causal mechanisms rather than "in attempts to control the specificity of unsustainable events" (Drummond and Marsden, 1995, 59). Thus measures to reduce private vehicle use by improving public transport will always fail until it is understood that personal transport actually affords many people, particularly women, a considerable measure of personal freedom. It is really to restrictions on autonomy that we must look for at least a partial answer to this vexing problem, as well as to social norms which promote individual consumption. Causal mechanisms therefore may include impalpable social forms like norms, values and conventions, as well as concrete social structures such as laws and institutions. As consumption is as much a part of the problem of unsustainability as production, we need to know how consumption norms are legimated and sustained, and, perhaps more to the point at this juncture, how to circumvent nonviable norms.

The judgement has consequently been made that intervention for sustainability must be undertaken at all levels and scales of regulation (Gibbs, 1996, 7). The authors mentioned above have drawn upon a typology of social regulation forms outlined by Peck and Tickell (1992) which extends from concrete forms of regulation such as environmental legislation to the abstract form of the MSR experienced in individual nation-states. As Gibbs (1996, 7) concludes, "[t]he value of taking a regulation approach lies in identifying the need for this totality of approach rather than upon any individual form or scale".

A further advantage of integrating regulation theory and sustainable development is that it constitutes a realist approach to social transformation - it starts with what is. For Drummond and Marsden (1995, 53), the solution to contemporary environmental problems does not lie in the overthrow of capitalism, even though capitalism is heavily implicated in their generation. A realist programme takes the transformational character of capitalism as a given with the result that sustainable development is "conceived and promoted within the reflexive progression of capitalism and the conflict and struggles which sustain and renew the dynamism of capital accumulation" (Drummond and Marsden, 1995, 62).

Regulation theory can also reveal a great deal about the potential sustainability or otherwise of current trajectories of development and the modes of social regulation that sustain them. It can be used to demonstrate that ecological modernization, the contemporary institutional fix most attractive to business and governments, can only amount to a temporary postponement of the crisis tendencies now manifesting in social and natural environments. Technical and procedural innovation for more efficient energy and material resource use and its management through environmental legislation is unlikely in itself to achieve sustainable modes of production. As long as existing institutional structures and social values favour materialist, individualistic and competitive behavioural forms, the demand side of the equation remains untouched.

Moreover to maintain a sole reliance on technology, albeit ecologically benign, is to remain imprisoned by the myth that social progress can be engineered by technological development. It also implies a continuing susceptibility to technologies which exceed "the human capacity to predict and control the consequences in time and space" (Altvater, 1993, 224) and hence to the unintended side-effect. What is required is the institutional capacity to be able to ask searching questions of, for example, biotechnology, such as who benefits, to what degree and at what cost.

If technology has limits so too does the managerial approach to correcting the consequences of unsustainable practices. If the focus of sustainable development is restricted to environmental problems and their solution through, for example, environmental legislation, the dynamics of social process and action and the reproducibility of unsustainable human practices and behaviours is ignored. For Drummond and Marsden (1995, 52) there is little future in managerialist measures:

> It is difficult to see how sustainable development can be singularly concerned with measures to ameliorate the consequences of unsustainable practices through concrete forms of regulation which address specific problems, be they prohibitive legislation, fiscal measures or whatever. Such a project is flawed in its conception, and it is probably untenable. The effective articulation and operationalization of such an approach is almost certainly beyond the scope of human agency, for it would require the management of what is in practice the unmanageable.

Similarly, there is little point in remediation of environmental damage, through, for example, soil conservation and water quality measures or reafforestation or rehabilitation of mine sites (though these are laudable projects in themselves), if the practices and values which generate the damage are not addressed simultaneously. Moreover, the danger is that the reconstruction of the environment simply becomes another "field of capital accumulation" (Altvater, 1993, 213). To be sustainable, any new regime of production/consumption must minimize the amount of entropy discharge or environmental degradation. Nevertheless, both environmental restoration and reuse of waste products involve the use of fresh energy and materials:

> The repairs thus become a constitutive part of the problem. There remains only one answer: namely, from the outset to organize the transformation of energy and materials in such a way that the unavoidable entropy increase is kept as low as possible; to build into the functioning of the economic system a series of imperatives which prevent ecological damage (Altvater, 1993, 213).

Yet, imperatives which are capable of changing individual behaviours, have to be more concrete than ethical imperatives. These demand too much of the individual, for whom rational free-rider behaviour is likely to outweigh moral injunction. Granted the collective character and global spread of many environmental problems, it is difficult for many individuals to comprehend how their individual efforts can contribute to problem-solving. It is therefore more rational to free-ride on the efforts of others. Campaigns for reductions in waste production and personal motor transport use, for example, are likely to have limited efficacy unless the ethical imperatives which they represent are institutionalized and backed by sanctions "so that they become behavioural constraints for everyone", or rather "institutionalized rules of ecological behaviour" (Altvater, 1993, 209, 208).

The application of regulation theory to the sustainable development discourse thus suggests that, for an ecologically, politically, socially and economically sustainable regime of production to emerge, a radical new consensus for the contemporary crisis of accumulation is an essential prerequisite. It will involve not only ecologically benign technologies, environmental protection legislation and

environmental restoration measures, but also the replacement of current forms of production/consumption and the values, norms and institutions that sustain them. In regulation terms it will entail a reconstitution of both the social regulatory mode and the mode of accumulation.

There has been some debate among regulation theorists (Jessop, 1990; Lipietz, 1992; Tickell and Peck, 1995) about whether the neoliberal turn in western democracies represents a stable and reproducible institutional fix consequent on the breakdown of the mass production/mass consumption Fordist industrial model or whether it is part of the crisis. In line with discussion in Chapter 1.9.1, where neoliberalism is discussed as a futile 'bailing out' exercise, I incline to the latter view (expressed also by Lipietz, 1992 and Tickell and Peck, 1995). Although neoliberalism is capable of releasing growth in the short-term, "as a political-economic programmme it seems incapable of securing the medium-term reproduction of that growth, given its susceptibility to cyclical imbalances and short-term plundering" (Tickell and Peck, 1995, 368). Neoliberal regulation embodies a number of contradictory tendencies, including a tendency for social polarization, progressive alienation from production and consumption, accentuation of boom/bust cycles of business (which have become global in their movement), and international instability resulting from global competition and accelerated environmental decline, all of which make it "internally crisis-prone and therefore unstable" (Tickell and Peck, 1995, 366). Neoliberalism reflects, accentuates and accelerates capitalism's contemporary accumulation crisis. This is best encapsulated by Tickell and Peck (1995, 370) thus: "Neoliberalism is now, and ever was the politics of the crisis. ...[It] is an expression of capitalism's contradictory logic, resurfacing as a symptom of the crisis itself".

It is the politics of intensified restructuring which, because of its reliance on particular policy instruments, is unlikely to stabilize into the crisis-attenuating regulatory regime required by regulation theory. Its inherent contradictions are generated by precisely those policy tools so strenuously promoted by its apologists, namely improved competition, deregulation, privatization and market regulation. It is precisely these instruments which are so environmentally damaging. Not only can

market regulation, for example, not be relied upon to adequately regulate capitalism (Lash and Urry, 1987), but the practices and processes encouraged by an over-reliance on it are incompatible with ecological sustainability. I do not intend to rehearse the arguments against markets here (see Altvater, 1993; Kinrade, 1995; Eckersley, 1992b), but suffice to say that the principles of 'inter- and intragenerational equity' and 'protection of biodiversity' are inevitably contravened by the inability of markets to price collective goods or to account for all interests. Private property rights as an instrument of environmental protection are similarly suspect, because, as Haworth (1994, 111) argues, they cannot be relied upon to provide capitalists with sufficient incentives to ensure collective ends. Ineluctably, the business rationale of minimizing costs will trump environmental concerns and trade-offs for objectives other than equity and ecological integrity will follow. Besides, as we have seen (see Kinrade, 1995, 98-99), the evidence for the utility of property rights in sustainability is not at all compelling.

The restructuring of the conditions of production undertaken in recent decades under the influence of neoliberal ideology has in fact been counterproductive; it has only succeeded in undermining these conditions, as identified by Marx, namely labour power, the environment, and communal infrastructure (O'Connor, 1994b). It is therefore reasonable to conclude that neoliberalism is a dead-end with respect to sustainability, and that its ascendency represents "a regulatory hole, one which has elements of market regulation but which represents the *absence* of a new institutional fix" (Tickell and Peck, 1995, 369).

The coincidence of the end stages of a long wave of capital accumulation (on this aspect, see Soja, 1989, 27-28; and Mandel, 1978, Ch.4) and the approach of ecological limits presents several formidable challenges for the formation of a viable regulatory framework. It is clear that, given the global character of capital circulation and the global nature of risks generated by capital accumulation processes, any replacement framework must have a significant global component. Individual states are likely to be deterred from taking initiatives to regulate global capital through fear of punishment from international money markets via capital flight, unemployment, and loss of legitimacy. Existing international organizations, such as the IMF or the

World Bank, remain too heavily imbued with neoliberal ideology and are likely to prove to be destabilizing forces (on the limitations of these institutions, see Harris, 1992). What must be resolved is whether capitalism is compatible with the principles of ecological sustainability. Arguments presented thus far suggest that ecological modernization approaches can only constitute an interim phase in social transformation and that adoption of sustainable modes of production/consumption will involve much more than the simple restructuring of industry. It will mean radical societal transformation and a radical reorientation of societal objectives. The challenge is how to achieve this degree of social change while limiting social, economic and ecological disruption, a dilemma which I shall address in due course.

5.5.2: Reorienting Sustainability

With capital in crisis once again, it is timely to revisit Marx on the question of social alternatives, namely the reminder that capital accumulation through the pursuit of surplus value is not the only or an eternal social form. Consideration can then be given to alternative social imperatives and alternative stores of value. As yet theorizing about such system currencies remains tentative, although critics are quite clear on what cannot be valued by the free market. Michael Redclift (1992, 41) suggests that these stores of value might be founded on the "conservation of the stock of natural capital, not the generation of income flows at the cost of natural capital stocks", while the stock of social capital might also assume greater importance where surplus value is not the primary objective. Relatedly, O'Riordan and Voisey (1997, 3) envisage that wellbeing may well be the currency of the future, overriding efficiency, and that wellbeing could constitute the object of development rather than the increasing throughput of energy and materials. Under a sustainability schema, the repository of value lies not in the production of surplus but in use-value or, as Redclift (1992, 41) prefers, *utilization value*, which expresses "the value of a product throughout its life, rather than at one moment. ...Utilization values should provide the signals for market activity, not ephemeral market prices". An economy founded on use-value is one oriented to meeting real needs, not manufactured wants. Non-monetary values, such as those produced in the informal economy by domestic and voluntary work, can then be assigned some value, while activities such as waste

recycling and minimization become generalized objects of policy rather than optional extras.

5.5.3: Localization and Agency

The transition to sustainable modes of social regulation has so far been characterized by the absence of "an intrinsic policy focus" in the direction of "economic durability, precautionary stewardship and citizen empowerment as a unifying transitional engine" (O'Riordan and Voisey, 1997, 13). O'Riordan and Voisey's assessment of progress towards sustainability is that the institutional response is only "embryonically discernible". They also discern in the politics of the sustainability transition a tension between homogenizing globalization forces and the cultural heterogeneity being promoted through the development of local self-reliance. The forces of global competition and free trade, reinforced by deregulation and privatization of formerly state responsibilities - utilities, social services and so on - are at odds with movements to protest the contraction of local services, to defend local environments and cultural heritage, for self-help - like Local Employment Initiative schemes and formalized barter arrangements - largely because such groups have lost faith in the capacity of governments and the formal economy to provide for their needs. The emergence of ultra conservative political groupings also reflects the conflict between these two sets of forces.

It is in the competitive globalization/empowering localization tension that O'Riordan and Voisey (1997, 20) perceive possibilities for "serious institutional innovation". Although prospects at the global level are only dimly beheld, "there is evidence of the beginning of a serious effort at local governance in the form of environmental fora which are involving people and interests in a common vision of local areas, and the mobilization of local groups and people to work towards achieving these visions" (O'Riordan and Voisey, 1997, 20). Dryzek's (1996b, 44) reasoning behind this phenomenon is that there is potential for institutional innovation at the local level where the imperatives of the state in ensuring the conditions of production are less urgent. What is radical about these groups is that, although they are often established to manage local resources for economic objectives, because they must include all stakeholders, issues other than purely resource management issues are inevitably raised with the result that questions of community wellbeing - social amenity, equity (in the distribution of environmental bads and goods), local economic viability and political possibility - are being integrated with issues of ecological wellbeing.

Paradoxically, it is the contraction of central governments in response to declining taxation receipts reinforced by the ideology and policies of economic fundamentalism, that ushers in potential opportunities for local community empowerment and citizen activism. The integration of environmental, social, economic and political objectives through environmental fora, such as catchment management groups and natural areas protection groups, embodies the possibility of real change in norms, values and attitudes and consequently in practices. Such groups have the potential to be influential sites of the social environmental learning that is a necessary precursor to the modification of values and habits appropriate for ecologically sustainable societies. The good citizen in this society will possess a degree of environmental literacy or what David Orr (1992, 92) calls "the knowledge necessary to comprehend relatedness", together with a precautionary attitude of care/stewardship and practical competence deriving from involvement in activism for local environmental protection and community-building.

So far the discussion has focussed predominantly on structural aspects of sustainability. Although regulation allows for a limited degree of agency, it is largely concerned with structural constraints in the postponement of crisis. A radical ecopraxis also requires an understanding of both the potential and limits of human agency, because as Redclift (1992, 42) concludes:

> The tortuous road towards greater global responsibility for environmental change ... is likely to be built upon the daily lives of human subjects, and the recognition that these lives involve choices of global proportions.

Theories of agency, such as Giddens's (1984) theory of the structuration of society and Sztompka's (1990) model of social self-transformation are concerned to delimit the potential of agency in terms of constraining and enabling factors, the characteristics of actors and opportunities for action. The latter's model is especially relevant to the design of institutions which can promote sustainable rather than unsustainable practices, because Sztompka is interested in delimiting precisely those traits of agency consistent with social progress. His framework takes into account (1) the characteristics of actors - their capacity for creativity and innovation and so on-which impact on the quality of agency; (2) the characteristics of structures - whether pluralistic, heterogeneous, complex and so on - which dictate whether there is richness or paucity of options; (3) the characteristics of the natural environment - whether harsh or benign; (4) the characteristics of tradition - whether there is respect

or wholesale rejection; and (5) the characteristics of the expected future - whether expectations are marked by hope and optimism or despair and pessimism. What is attractive about the model is that it can be both place and time specific. It can apply to any group of actors at any time and however these characteristics combine for different groups of actors will influence desired outcomes in different ways. It allows for a plurality of different responses to the sustainability imperative, dependent upon prevailing constraints and opportunities. It can also be used to highlight deficiencies of agency and institutional limitations which may need to be addressed in planning for sustainability, for it is clear from the model that agency will only be progressive when motivations for action coincide with opportunities (Sztompka, 1990, 257). It is important therefore to consider the limits as well as the potential of human agency (Drummond and Marsden, 1995, 53).

Depictions of agents in liberal societies are not at all conducive to the needs of sustainability. Throughout modern history, critics from Marx (1964) to Marcuse (1964) have expressed a concern for the unidimensionality of the modern individual. Particular deficiencies have also been recognized. Thus Orr (1994, 51) thinks that modern ways of thinking encourage cleverness at the expense of intelligence; Daly and Cobb (1989) and Mulgan (1997) lament the loss of moral competency; while Dryzek (1996b) is concerned about the narrowness of the self-serving individual, the rational egoist, promoted by prevailing economic rationalist policies and the implications for democratic politics. These inadequacies have been blamed on the "mental apartheid" approach initiated by Descartes (Wackernagel and Rees, 1996, 134).

The point is that the calibre of agency has been greatly circumscribed in modern times, linked as previously noted to the loss of habitat. More particularly, Orr (1994) contends that the homogenization of nature is undermining human intelligence and, indeed, that sanity is dependent on biological health. Similar arguments had been presented two decades earlier by Geoffrey Bateson (1972), by Felix Guattari (cited in Conley, 1997) and by Theodore Roszak (1981). The lesson to be drawn here is that the character of institutions and the health of biological contextualities bear directly on the quality of agency as well as framing opportunities for action. The design and redesign of institutions for sustainability must therefore account for these deficiencies of agency while encouraging norms of responsible stewardship and providing opportunities for learning and civic engagement.

5.5.4: Reorienting Consumption Norms

Consumption norms, it is recognized (Drummond and Marsden, 1995, 61), are heavily implicated in the cycles of environmental decline and generational inequity. They are reinforced by an individualistic philosophy which is probably more relevant to attempts to modify over-collectivized, totalitarian societies than it is to the societies which have already achieved high degrees of individual autonomy (Etzioni, 1996, 38). Addressing the problem of overconsumption is not to drop out of society and repair to a commune as the counterculturalists of the 1960s did, leaving mainstream values and practices largely untouched. Etzioni (1996, 83-84) thinks that the problems of throughput and overconsumption and the concomitant differentials in the provision of basic needs are better addressed in ways compatible with a modern economy if the affluent societies were to embrace sources of satisfaction that are not resource intensive at the same time as they adopted forms of voluntary simplicity. Consumption would then be limited to those goods which meet true needs, while "status goods" (fashion fads and latest technologies) would be largely eschewed. Such a movement could be expected to exert far-reaching and positive consequences for some of the planet's seemingly intractable problems and the dysfunctions of modern life. It would free up resources now appropriated by the affluent nations through their greater purchasing power to meet the needs of the less advantaged of the world's communities. In addition, for those in the First World, who must expend inordinate amounts of time on work for the purposes of acquisition, more satisfying activities based around self, family and community would then be possible. A movement such as this could be an antidote to the narrowly self-interested, economically rational consumer promoted by the neoliberal agenda. Status would reside in the extent of one's contribution to community wellbeing, defined by a wide range of social and environmental indicators (see the various contributions relating to this aspect in Ekins and Max-Neef, 1992) rather than in economic stature. The resultant societies would be more secure, because, as Etzioni (1996, 84) observes, "social basics are easier to secure than a consumerist way of life".

There are embryonic indicators of such a value change in the growth of what Luke and White (1985, 44) refer to as "exurban communities", reflecting a "developing interest in the pace, aesthetics, and stability of rural life". Hopefully, the frugality characteristic of rural peoples will also be adopted. Etzioni (1996, 84) notes the adoption of a moderate version of the voluntary simplicity/other satisfactions mode by urban-based professionals and academics in increased attention to sport and

exercise as palliatives for the stresses and psychic disturbances of high-powered work environments. Recently, too, media attention has focussed on the number of women who have begun to eschew corporate executive success in order to concentrate on family and community. Notwithstanding these nascent indications, the task will be to ensure that voluntary simplicity becomes established as a shared core value underlying pluralistic conceptions of the good life in all societies aspiring to sustainability.

5.5.5: Autonomy and Creativity

A programme of *praxis*, with sustainability as its regulative ideal, should be grounded in an understanding of the prospects for responsible autonomous development in the context of the autonomous flourishing of all life. It should be able to raise to consciousness an appreciation of both the blockages to and the possibilities of agency prior to responsible action for the removal of those constraints on human capacity. I interpret autonomy, as the key objective of agency, as being in command of the opportunities and conditions of creative self-development. Autonomy is thus not synonymous with just individual freedom, but also encompasses "the needs for self-expression, innovation, creativity and self-government" (Etzioni, 1996, 24). Creativity and innovation are the capacities most in need at this time of civilizational change and, unlike individual freedom, they are the components of autonomy most in short supply. Before I consider impediments to creativity, I should discuss blockages to autonomous action generally.

Blockages to autonomous development can be said to be synonymous with the loss of capacity for responsible action. Capitalism, as the dominant social form, is deeply implicated in the erection of impediments to autonomy. Castoriadis (1992, 20) places "the unlimited expansion of 'rational mastery' of the capitalist project" behind the weakening of the critique of reason and creativity's subordination to certainty for the "complete atrophy of political imagination". This condition is reinforced by the deregulation/privatization/depolitization policies of the neoliberal discourse, itself responsible for a "widespread and rising collective amnesia". Moreover, its instrumental rationality distorts self-development by limiting the range of acceptable and valued human activities to those which are profitable (Berman, 1988, 96, 94). Berman (1988, 93) ironically observes that, although capitalism encourages a frenetic activism, its actors are closed off from "its richest possibilities":

> [Its] "desperate dynamism ... destroys the human possibilities that it creates. ... It fosters ... self-development for everybody, but people can develop only in restricted and distorted ways. ... [E]verything non marketable gets draconically repressed, or withers away from lack of use, or never has a chance to come to life at all" (Berman, 1988, 96).

The value of communal ties, for example, does not rate in market economies. But, paradoxically, autonomy is threatened by the loosening of these binding ties, promoted by atomising market forces (see Chapter 3.5.4). Communitarians such as Etzioni (1996, 26) argue that the "social fabric sustains, nourishes and enables individuality rather than diminishes it". Indeed, sociability is crucial in the building of moral competency in the individual. With the dissolution of the social fabric, a phenomenon common to many western societies, sociability declines and with it human moral potential and consequently the capacity for responsible action: "The greatest danger to autonomy arises when the social moorings of individuals are severed" (Etzioni, 1996, 26-27). Atomization invites totalitarianism, or at least anomie, alienation, withdrawal, and antisocial behaviour, not individual liberty as promised by free market proponents.

A further assault on autonomous capacity is to be found in the explosion of electronic innovation in the last several decades, resulting in the electronic compression of space and time (Harvey, 1989; Virilio, cited in Conley, 1997). "Electronic dazzle", so called by Virilio, ensures temporal and spatial disconnection and a "blindness to the 'real'" (p.84). Movement is dominated by the speed of light via the medium of electronic technology with the result that sensory faculties become dulled, distance annulled and the various scales of time - seasonal, tidal, ecological and geological - ignored. Time is focussed on the present alone and humans become disconnected from a sense of the past and the future. According to Virilio, it is electronic dazzle and its disconnections which blind humans to persistent ecological problems-naturally in climatic upheavals and socially in civil unrest, ethnic strife and collapsing nation-states (Conley, 1997, 84). These manifestations of social crisis are, in fact, blind responses to disconnection rather than the reasoned recognition of their true origins. The loss of natural knowledge combined with enfeebled sensory faculties is thus heavily implicated in a depleted capacity for responsible action in attending to obvious problems.

While human autonomy generally is blocked, the quality of autonomy that is of most concern is creativity, because it is that quality which is most in need at this time of crisis. If humans are to have some measure of autonomy, they will need a

clear understanding of impediments to the creative function. That creativity and novelty are integral both to human freedom and to evolutionary processes and that human freedom cannot be conceived independently of the latter is the conclusion reached by Fritoj Capra (1998, 12-13) in his review of Ilya Prigogine's reformulation of classical physics. Prigogine's new dynamics solves the long-standing contradiction between the reversibility notions of classical Newtonian mechanics and the irreversibility theorems of the second law of thermodynamics. In so doing, Capra claims, Prigogine "unifies our understanding of several key characteristics of the world in which we live: the evolutionary nature of reality (the arrow of time), the diversity of the living world, the continual emergence of novelty, and the human experience of creativity and freedom" (Capra, 1998, 13). If Capra's reading is correct, both human freedom and ecological sustainability are dependent on dissolving contemporary blockages to creativity.

These blockages are implicit in dominant modern social forms and their validating rationalities. Hans Joas (1990, 186), for example, credits progressive philosophies of history with effecting a "dichotomy between rational, e.g. utility-oriented, and normatively-oriented modes of action, making the creative dimension of action inconceivable". Dryzek (1990, 5) similarly argues that instrumental rationality bifurcates the creativity/freedom linkage by furnishing the power and technology to create the material conditions of human freedom, but paradoxically suppressing the playfulness and creativity needed for humans to realize that freedom.

Blockages to creativity have been traced by John Maguire (1996) to a fear of the creative dimension and the caution which is a necessary consequence. Although Maguire does not explain it as such, I locate the origin of a fear such as this in the need to control the irrational, the wild and the emotional, the same need which prompted the early moderns to opt for stability and certainty and thus to valorize instrumental rationality. This pervasive fear of modern life, figuring as problems as diverse as domestic abuse to global ecological problems, has crippling implications for responses to both social problems and ecological threats. Fear and caution account for our seeming inability to care for ourselves, others and the environment; for our apparent incapacity to respond to unequivocal danger signals; or to make use of the huge banks of data on poverty, inequality, the debt crisis or ecological threats in order to address the incongruities and absurdities of modern life; for our acceptance of disaster and catastrophe, including episodes of spontaneous violence, as abnormal events rather than the normal reflection of the absurdities of the modern condition; and consequently for our inability to act constructively. Paradoxically, it

also accounts for the overconfidence of our leaders and for the evasion of responsibility which has characterized the modern age. This "emotional illiteracy" (Maguire, 1996, 176) is a factor which must be accounted for in ecological policy efforts.

Notwithstanding the impediments to creativity outlined above, the present crisis in the belief in progress (discussed in Chapter 1.5.2) represents an opportunity for the "new connection of responsible action to progress" (Joas, 1990, 185) through the "emergence of novelty". Indeed Anne Buttimer (1993, 214) observes that creative or Phoenix periods (see pp. 41-45) in western intellectual history have generally been contiguous with periods of transcendence of constraining structures following on critically reflective, Narcissistic phases in search of "new levels of understanding humanity and its terrrestrial home", driven by the need to "solve problems and improve the human condition" (p.65). That modern life appears to be beset with seemingly intractable problems and irreconcilable contradictions, and is now subject to a chorus of critique from postmoderns, environmentalists and ultra-conservatives alike, is indisputable, but, as yet, indicators for a transcendence of the productivist model are little more than embryonic.

If creativity is to be integral to ecopraxis, there is needed some understanding of the conditions under which the creative impulse is likely to flourish. But firstly, some attention should be given to how the flourishing of creativity can coincide with responsible action. In this respect, Joas (1990, 188-189) utilizes the typology of creativity defined by Abraham Maslow, who delineated primary creativity, involving "the release of 'primary processes' of fantasy and imagination, of the playful and enthusiastic" from secondary creativity, "the rational production of something 'new' in the world, be it technical or scientific". Under ideal circumstances these two types of creativity are amalgamated to become 'integrated creativity'. Joas (1990, 188) contends that modern progress has released secondary creativity as technological and economic improvement in abundance but that evidence of growing dissatisfaction with the failure to progress other sectors of society presents us with two alternatives. The first option is an irrational retreat to primary creativity through Romanticism or Fascism, or alternatively, an integration of the two aspects, which would lead to a "higher form of action ... not indifferent towards the normative evaluation of the products of creativity" (p.188-189). As it is now, secondary creativity aligned with instrumental rationality ensures material abundance for some, but lacks the steering capacity of primary creativity's normative dimension to align production with real

needs or to guide the uses to which its products are applied (see Berman, 1988, 27-28 and Poole, 1991, 30-31 on the destructive creativity of capitalism).

Having established that responsibility is integral to true creativity, what is now needed is some conception of the conditions under which creativity may flourish. In opposition to conditions of closure, stability and control, the relevant state is more likely to be characterized by openness, flexibility and diversity, which also constitute the characteristics of viable ecological systems. In relationships between social and natural systems, this will mean that, because ecosystems' signals constantly change, communities must have the capacity to adapt to changing signals. To be adaptive, communities must have forms of organization which are open to new interpretations, new types of signals, and open to changing their organizations in order to respond effectively (Norgaard, 1994, 166). Creativity is thus dependent upon the recognition of ecological embodiment (Maguire, 1996, 186). Moreover, as Mulgan (1997, 36), in his optimistic account of a connected world, concludes, the "capacity to innovate or create depends on dissonant and complementary ways of thinking, not on consensus".

Having identified the conditions under which creativity is likely to flourish, where we may search for creative potential should also be determined. In particular it is the potential for "integrated creativity", which must be identified and fostered. Romand Coles (1992) draws on the notion of ecotones or 'edge effects' to illuminate creative possibilities. In ecology, edges, as the "intersection between differently constituted regions" (p.1), are zones pregnant with evolutionary potential. Our civilization, Coles contends, has essentially attempted to eliminate edges by obliterating difference via the totality of Reason, or at least places little value in them. He posits potential richness and creative freedom in these areas of intersecting differences. It is this innovative potential that Dryzek (1996b, 47-53) recognizes in the interaction between the state and new social movements. The latters' freedom from the imperatives conditioning state action allows them a degree of autonomy, which further permits them to experiment with democracy in different forms. For these oppositional movements, "institutional innovation is always on the agenda [and as] their own identity is always in the process of recreation, concepts such as autonomy, freedom and democracy can come to be defined in new ways" (Dryzek, 1996b, 52). They therefore represent the most obvious sites of creative potential with their non-instrumental rationalities and democratic organizational innovations.

Secondly, as integrated creativity is a characteristic of collective (not individual) action, attention to blockages has to be focussed at the level of systems. It is the absurdities of modern existence which can be used as reference points to the systemic blockage of responsible creative action. Thus spontaneous violence and its numerous manifestations - abuse of women and other species, youth suicide, serial killings, and massacres - all of which are suggestive of moral regression and communal dissolution, constitutes one starting-point where communities might "discover or create ways of life which challenge the rationalized structures of mainstream social life" (Poole, 1991, 151). The essential criterion for any such movement is that it be forward-looking, not harking back to some mythical golden past.

5.5.6: Sustainability and Ecological Competency

Having earlier outlined the deficiencies of agency, I now address the qualities or competencies which might be required for an individual to live responsibly and well on a finite planet. I have alluded to the connections between the loss of moral fluency, the loss of natural knowledge and enfeebled sensory faculties, while others (Orr, 1992; 1994) lament the erosion of a vibrant civic culture, and indeed, directly link the decline of civility and citizenship to environmental decline (Leopold, 1949; Orr, 1994). In this section I discuss the relationship between ecological sustainability and a viable civic culture and why ecological modernization as a technical-institutional fix will do little to further responsible citizenship.

The argument centres around the contention that healthy, sustainable communities require their citizens to be not just democratically literate but ecologically literate as well. David Orr (1992; 1994) is the theorist who has done most to develop the notion of 'ecological literacy', prefigured in Aldo Leopold's 'land ethic', where Homo sapiens assumes the function of "plain member and citizen" of the land-community. It is the land-community to which respect is owed as well as to fellow members of it (Leopold, 1949, 204). Leopold had bemoaned the failure of education to foster an understanding of ecology and the tendency of modern urban lifestyles to disengage citizens from ecological processes (Leopold, 1949, 223-224).

Briefly, ecological literacy may be defined as "rooted knowledge" (Prakash, 1995, 10) which encompasses the theoretical/practical, moral and aesthetic dimensions of the experience of responsible dwelling. It is an understanding derived from a knowledge of and attachment to particular natural localities. It is an

understanding borne of the acknowledgement of the existence and interests of other entities, and of "patient disciplined study of the natural world" (Orr, 1992, 90-91). It requires an ability to think broadly, "a breadth of experience with healthy natural landscapes", a capacity for aesthetic appreciation and a sense of responsibility for the other (Orr, 1992, 87). The development of these competencies is obstructed, firstly, by specialization, secondly, by confining learning to written texts and desks, thirdly, by acceptance of ugliness as normality, and fourthly, by the encouragement of modern institutions to evade responsibility.

It has been argued that ecological literacy is a precondition for sustainability (Orr, 1992). An ecologically literate population with an understanding of the environmental facts of energy, resources, land, water and wildlife is a precondition for wise public choice. The intimate knowledge of landscapes is also crucial to good thinking and development of the capacity to discern healthy from unhealthy natural systems (Prakash, 1995) and is in turn critical to development of the capacity to critique the absurdities which result from misuse of those landscapes.

The most pressing and obvious reason to improve environmental literacy is to avoid the production of further risks. Late modern society is beset with environmental risk, largely, as earlier discussed, produced out of ignorance and often resulting from the best intentions of scientific and technological endeavour. The problem of experts and specialization now makes specific novel demands on the literate citizen with respect to environmental policy debates. It is impossible for citizens to fully grasp the scientific/technical merits of any development proposal. What is additionally required of the ecologically literate citizen under these circumstances is "familiarity with the social processes that accompany most environmental issues" (Schneider, 1997, 457). This implies familiarity with policy-making processes and the capacity to ask questions of a normative nature to do with possible outcomes, risk and justification. The skill needed is an evaluative skill to assist in assessing the relative merits of scientific claims and development proposals. It has also been suggested that participants in ecological issues will also need to be educated about the relationship between environmentalism and political values (Press, 1994, 110).

However, wise public choice is dependent not only on ecologically literate individuals. It is also, as suggested by John Dryzek (1997, 198), related to institutions and discourses which have the "capacity to facilitate and engage in social learning in an ecological context". The requirement that institutions should be able

to assess their own shortcomings (that is, be critically reflective) becomes more and more urgent as the intensifying interaction between social and natural systems generates higher and higher degrees of uncertainty and complexity. Such a capacity is likely to be encouraged by the strong sustainability discourse, which contains a potent reflective element; that is, it is self-monitoring and self-critical and therefore conducive to social environmental learning (Dryzek, 1997, 199; Jacobs, 1995a).

The corollary of this conclusion is that any programme which seeks to respond to ecological limits purely through technological adjustment lacks the necessary normative capacity to address the inevitable limits on throughput and waste production or questions of equity which remain outstanding (Christoff, 1996, 481). The technical fix approach of ecological modernization also assumes that social, political and economic life can continue as usual. In behaving thus "it completely underplays the civic and moral education of modern publics. It ignores the necessity of teaching the communal skills to live and learn again in ecologically literate and morally responsible communities" (Prakash, 1995, 4).

Even more crucially, ecological modernization allows modern societies to go on avoiding responsibility, to avoid facing up to the reality that we are responsible for our ecological dilemma. It allows us to go on pretending that we are "beyond the laws of ecology, thermodynamics or even morality" (Orr, 1992, 139). In addition, being obsessed with the "hardware of sustainability" has meant that little attention has been paid to the "software of sustainability", on the characteristics of the people who will be needed in the arduous process of building sustainable societies (Orr, 1992, 139). As the ecological crisis is clearly not only a technical problem but also a challenge to existing modes of learning, working and dwelling, the transition to sustainability will make quite specific demands of individuals and of institutions. It is my contention that those skills and virtues can only be fostered within a viable civic culture and that the good or virtuous citizen must necessarily also be an ecologically literate one.

Real or authentic citizenship - so called by Orr (1994, 124) - is both political and ecological. The notion of citizenship in liberal democracies is a debased one with limited expectations exerted on citizens - to pay one's taxes, obey the law, and to vote periodically. The declining rates of voter turnout in constituencies where voting is not compulsory suggests that voters no longer take their citizenship rights seriously. Orr (1994, 124) reasons that dependence on technology as an escape from ecological responsibility has been a factor in cheapening citizenship, because it has

absolved citizens from the need to exercise moral judgement in matters of the public good. The decline in this facility has been further compounded by the mindset of life as lottery; that what one gets out of life is "only a matter of luck, chicanery, or happenstance, not hard work, skill and obligation" (Orr, 1994, 124) One takes what one can get; one is not required to give. The result is that few citizens in western democracies are prepared to make the sacrifices necessary for resources currently consumed in excess in the affluent countries to be transferred to satisfy the basic needs of those in the Third World, nor are they prepared to contemplate the full costs of consumption-oriented lifestyles, either for global equity or for ecological health. Much of the blame for our ecological dilemma is laid by Orr (1992) on the dominant systems of knowledge/education, because in neglecting to teach those in their care to be caring stewards of the earth and its inhabitants, they have failed to impart either a sense of civic/moral responsibility (Prakash, 1995, 13) or to build ecological awareness.

By analysing the deficiencies of citizenship in relation to the sustainable organization of democracies, we have developed some idea of what will be required of the environmentally literate citizen and the kind of polity which is likely to foster those particular qualities. The ecologically literate citizen will have, as Brennan (1994, 5) suggests, firstly, "a blend of ecological sensitivity", fostered by institutions and developed through practical experience in natural environments; secondly, an "informed awareness of natural processes" and of what might constitute environmentally benign or detrimental actions; and, thirdly, a "moral maturity", developed and fostered by active participation in authentic democratic discussion (Dryzek, 1997, 199). It is only through such participatory processes that citizens can fashion the normative/evaluative skills which Schneider (1997) argues are necessary for the assessment of competing scientific/technical claims.

As authentic citizenship can be grounded only in particular places, so neither can the authentic polity be an abstract arena of discussion. Politics, too, has to be rooted in particular places. Daniel Kemmis (1990, 41) argues for a politics and civic life that fits the places we inhabit:

> If in fact there is a connection between the places we inhabit and the political culture which our inhabiting of them produces, then perhaps it makes sense to begin with the place, with a sense of what it is, and then try to imagine a way of being public which would fit the place.

The story of modern existence is the surrender of control and responsiblity of large parts of our lives to distant centres of power with its associated dependence. Economic and political concentration is not conducive to vital communities or healthy democracy. That voter apathy is appearing simultaneously with a diminishing sense of place and the disappearance of community-scale economies is no mere coincidence (Orr, 1994, 168). Viable democracy will depend, in large measure, on citizens reclaiming responsibility for public decision-making.

5.6: Social Environmental Learning

Throughout the discussion, several allusions to social environmental learning in processes of sustainable development have been made. Social environmental learning has its roots in the social learning paradigm and it is therefore appropriate to canvass the relevance of the paradigm for a praxis of social reconstruction with ecological sustainability as its objective. According to John Friedman (1987, 406), social learning is "the theory of knowledge underlying radical practice [where] *action is always primary*. ... The imperative of action always has priority over the equal imperative of knowing". Its theoretical origins are located, firstly, in the pragmatism of John Dewey and its epistemological tenet of 'learning by doing' and, secondly, in the basic Marxist proposition concerning the unity of thought and action, that is, appropriate *praxis*. Social learning, it is argued, is the most fitting epistemology in an era of multiple crises where all previous certainties are being undermined, since "only an epistemology ... based on the unity of practice and transformative theory within the context of a continuing process of action and inquiry can give us grounds for hope" (Friedmann, 1987, 416).

The central concerns of the social learning paradigm are instrumental ones which make it particularly congenial to programmes of transformative action. These include (1) how to make use of social learning processes to effect social change; (2) how to motivate reluctant actors to modify their values and ideologies; (3) how to connect expert knowledge with local or informally acquired knowledge for change-oriented action; (4) how to facilitate relations of trust between professional experts and non-professional actors; and (5) how social learning relates to democratic theory and therefore how it can facilitate personal autonomous actualization. Because social learning is concerned with process rather than static relationships, it is a most appropriate paradigm for understanding change in highly dynamic social systems. Parson and Clark (1995, 430) proffer the hope that "learning about long-term social learning processes may help some agents better understand how to play a

constructive role or may suggest ways of structuring institutions, organizations or negotiations to make effective learning more likely".

One of the most impelling reasons for having recourse to the social learning paradigm is for precisely those reasons we are now beset with crises, namely the failure of conventional theoretical and semantic frameworks in addressing our present circumstances. The task will be to learn new ways of thinking and modes of language which supercede the familiarity and certainty occasioned by models premised on linearity, simple cause and effect, and the atomism of events, places and ideas. The new ways will be more appropriate to a "reality of systemic interactions, circular feedback processes, nonlinearity, or multiple causation and outcomes" (Michael, 1995, 463). Because social learning is a recursive model of thought and action or, as Friedman (1987, 304) says, "it feeds on its own practice", it is particularly suited to conditions of strangeness and unpredictability, where learning must be a continuous process. Under conditions of relative certainty and social stability, it is enough for the learner to know the right answer or to master particular bodies of knowledge. Under conditions of rapid change, learning must be an ongoing process involving the development of capacities for reperception, evaluation, implementation, and openness to continual revision (Michael, 1995, 464).

Sustainability and the conditions which have initiated a concern for development to be sustainable, namely the inadequacy of established myths, norms, values and practices, raise novel questions about the 'long term' and the 'larger interest', which existing thought and action frameworks, adjusted to atomistic and pluralistic social arrangements, are ill-suited to address. As Michael (1995, 465) remarks, "humans have had much more experience (ie., learning) in attaining and maintaining diversity than in creating systems integrated across boundaries". In spite of the emergence of obvious interdependencies, the conventional myths, norms and values, which provide feedback to regulate social processes, remain locked into atomistic and individualistic thought frameworks, so that emerging tensions between individual rights and communal wellbeing are not interpreted as they should be, as signals of fundamental societal dysfunction. Thus acknowledgement of ecological limits on production is approached, not as a problem of social/ecological dysfunction, but as a technical problem, which can be overcome through efficiency improvements and technological innovation. Sustainability requires recognition of the systemic and dynamic nature of the interconnections between economic production, human ethical and belief systems, and ecological processes. Work reviewed by Michael (1995, 468ff.) outlines constraints of a socio-cultural, cognitive and emotional nature, which

may act to obstruct desirable normative and behavioural transformation. However these same constraints offer opportunities for learning to perceive and act differently and to create new ways of being in the world (Michael, 1995, 474ff.)

A number of authors have concluded that social transformation is unlikely to originate in the state or in the private economic sphere (Dobson, 1996; Dryzek, 1996b; Friedmann, 1987) and have consequently looked to civil society for possible agents of change. If civil society is to be the site of transformative learning and practice, the social learning paradigm, with its emphasis on "dialogic processes, non-hierarchical relations, a commitment to experimentalism, tolerance for differences, and radical openness to communication" (Friedmann, 1987, 82), represents a theoretical resource which is particularly congruent with a programme of restructuring for sustainability. Radical sustainability, it was argued, is premised on democratic participation, bottom-up in preference to top-down decision-making processes, egalitarian and equitable relations with existing and future generations and other species, and the inclusion of local as well as scientific knowledges. There are thus numerous points of intersection between the social learning and sustainability paradigms, although the problem of long time scales is a novel one for social learning and may necessitate further development of the latter's evaluative elements to cater for this imperative. Certainly a prerequisite is a thorough understanding of evolutionary and ecosystem processes. Indeed, Parson and Clark (1995, 428-9) perceive social learning as the theory of social dynamics which can "complement the emerging theories of ecosystem dynamics to produce real understanding of the long-term, large-scale interactions of environment and development".

So far I have been concerned to demonstrate the congeniality of the social learning paradigm to a praxis of sustainability. As social learning is informed by a number of disciplines, it represents a considerable theoretical resource for policy-makers and educators who would seek to structure appropriate conditions for social environmental learning. It is its possibilities in this respect that I wish to explore. Some theorists of ecological change subscribe to the view that attitudes and behaviours can be modified by simply raising awareness of issues (see Pepper, 1996 on idealist versus materialist approaches). Social learning reveals this to be a naïve stance, for attitudinal and behavioural change are extremely complex processes. They are constrained by any number of factors (Michael, 1995, 468ff.) and made even more difficult under conditions of novelty and unpredictability. This is especially so with sustainability, which demands the radical cognitive and affective-

behavioural reconstruction (Friedmann, 1987, 186) of deeply-held world views and their associated entrenched habits and routines (Parson and Clark, 1995, 440).

Moreover, contrary to the conventional understanding, cognitive dissonance theory demonstrates that attitudes do not necessarily determine behaviours (Parson and Clark, 1995, 434). In fact, behaviours can influence actors to adopt different belief systems. There are obvious implications here for the structuring of sustainable practices. For example, the provision of recycling facilities by local authorities could theoretically influence residents to ultimately modify their consumption values and to voluntarily adopt other sustainable practices, such as composting household waste, reusing waste water, or indeed reducing waste overall.

Notwithstanding the reconstruction of individual values, norms and practices as a critical component of sustainability, a companion prerequisite is the redirection of collective goals. Friedman (1987, 187) supposes that such a redirection "may involve a long and painful process of "double-loop" learning", so called because it requires more than a "simple change in tactics or strategy ... to solve a given problem". It entails an "adjustment of the norms governing the action process and, specifically, a change in the actor's theory of reality, values, and beliefs". Such a major cognitive restructuring would have radical implications for the society-nature dichotomy, development and progress myths, production and consumption norms, and the patriarchal relations on which the social production of industrial society is presently founded.

If there is one area in which the social learning paradigm is inadequate with respect to sustainability it is that research has so far largely been confined to individual and organizational learning processes. As the novel components of sustainability are the long term and the communal good, collective learning processes also need to be addressed, especially the processes which lead to the formation and dissolution of collective norms and values. Parson and Clark (1995) have reviewed the application of evolutionary models to learning on the basis that they are both dynamic processes. Evolutionary concepts have been applied to ideas and behaviours at both the individual and organizational learning levels in order to explain processes of adoption, propagation and stability of novel ideas and values, although, as they note, "existing work in this area scarcely goes beyond provocative analogy" (Parson and Clark, 1995, 57). They conclude that the applicability of the various constituent concepts of evolutionary theory - origination of variation, propagation, selection, speciation, and species stability - needs more thorough

investigation. Nevertheless, there are some general conclusions that can be made using the evolutionary analogy, namely that any "presently ascendant ideology or thought system" necessarily has a provisional character to it and that in any pluralistic society there will be small populations of marginal ideas, which, as they persist in the face of unfavourable conditions, represent an "important reservoir of cognitive variability that can increase society's resilience to extreme environmental change" (Parson and Clark, 1995, 454).

In summary then, this section has attempted to flesh out the utility of the social learning paradigm for a praxis of sustainability. It is argued to be a most appropriate thought framework for conditions of emerging systemic effects, circular feedback and multiple cause and effect, the conditions responsible for unpredictability and uncertainty. As a dynamic process, it can further understanding of the dynamic interaction of social and natural systems, thereby facilitating processes of social environmental learning, which are crucial to sustainability objectives. As a theoretical resource, it can provide useful guidelines for structuring such learning experiences, while countering the naïvety of the idealist approach to ecosocial transformation.

5.7: An Ecological Restructuring Model of Social Transformation

The model of social change which best fits the guidelines discussed above is the ecological restructuring model. It also the model that Marius de Geus (1996) favours over piecemeal engineering and radical utopianism. The former is a conservative model of change given to small incremental adjustments even for the most acute problems. It can be characterized as an over-reaction to a misplaced confidence in radical utopian blueprints and the ills that their employment has inflicted on modern societies. The effect of the piecemeal adjustment approach is that public policy becomes enmired in crisis management, in the neverending extinguishment of brush-fires, simply because there is little capacity for creative innovation.

The green movement, in its far-reaching critique of modern society, seeks a fundamental reconstruction of society along ecocentric lines. Consequently it can be prone to the shortcomings of radical utopian blueprints: "the uncertainties and dangers that are inherent to all-embracing imperatives: unforeseeable 'new' problems, unintended consequences, discrepancies between theory and practice" (de Geus, 1996, 198). de Geus therefore opts for the transformative model in preference to the

wholesale renewal or 'muddling through' approaches because of the high risks involved with both. The ecological restructuring model encompasses far-reaching changes, but leaves room for adjustment in case things go wrong. Like Dryzek and Eckersley, he favours the metaphor of rebuilding, the former two theorists preferring to rebuild the ship while still at sea, while de Geus opts for reconstructing a house and in the process endeavouring to maintain its liveability:

> It is not that a completely new house is erected - in order to prevent the annihilation of capital, the usually high costs, the unpredictable problems, disadvantages and setbacks - but the existing house is more or less thoroughly altered, rebuilt, reconstructed, to comply with the newly formulated demands. ...In large part the house stays the same, yet simultaneously it undergoes a structural change (de Geus, 1996, 199-200).

The reconstruction process is less concerned with remediation of the house's obsolescence than with altering its structure. The implication for environmental policy is not simply to prevent any further environmental deterioration but rather to encourage the adaptation of institutions like the free market to the demands of ecology. Just as the house can be made more energy-efficient and water-saving with little cost, so too can the free market be brought into line with financial incentives and legal measures, such as penalties, internalizing costs, and environmentally benign production. However, bringing the free market into line is only the beginning. In the context of the house reconstruction analogy, such an interim accommodation could be compared with the situation where a run-down house is stabilized and made sufficiently habitable in order to embark on a programme of more extensive structural change in order to bring it up to the standard imposed by changed external conditions or family needs. If the free market is to be retained for the advantages it renders, it can only be under strictly ecologically limiting conditions. Its reconstruction must also involve the transformation of its underlying ethic, possessive individualism, and the redirection of its principle focus towards the satisfaction predominantly of needs. To draw on our analogy again, the normative foundations may need some rearrangement, as, for example, some extra underpinning for a relocated load-bearing wall.

The point that de Geus is making, however, is that ecological restructuring offers a flexible approach where adjustments can be made for any unforeseen problems, unintended consequences can be minimized, and theory and practice can operate recursively. Ecological restructuring thus turns out to be a model of social environmental learning. The point I would make, however, is that the application of

the middle-range reforms envisaged by de Geus, would need to be comprehensive, entailing the consideration of values, ideologies and legal/financial/policy instruments. One could imagine that if policy implementation was in any way defective, it could easily slip into piecemeal change.

What is further attractive about the ecological restructuring model is its philosophical antecedents, which are to be found in the modest scepticism of Montaigne and Hume. The latter, in particular, was unhappy with the claims made by the natural philosophers for natural reason and hence was critical of the Cartesian method and the claims made for it by the Utilitarians, who, influenced by the means apparently afforded by the Cartesian method for the mastery of nature, thought that society could exist as a rational expression of human design. Hume's reason is grounded in experience and empirical possibility and therefore yields a rationality sufficient for the limited planning of social ends. As de Geus remarks, the architect of the house under reconstruction is only needed some of the time. And with a rationality which is modest in its claims for the centrality of reason in human affairs, there is space for our part-time architect to enlist the aid of design principles informed by ecocentric concerns of care and responsibility.

5.8: Sustainability as Ecopraxis

This section endeavours to evaluate the prospects for sustainability as a project of ecopraxis, particularly whether it can further the regulative standards delineated above. To recapitulate: an ecopraxis of sustainability would be expected to (1) unify theory and practice with the aim of bringing a critical understanding to the problems of the ecological age; (2) encompass both ethical and political life, offering a practical-moral perspective on ecological crises; (3) foster ecological consciousness; (4) avoid the uncritical acceptance of ecological ideals and totalizing blueprints; while (5) pursuing adaptive change. The evaluation will proceed by comparing the relative merits of weak and strong sustainability discourses with respect to their performance on these criteria.

Habermas has characterized modern societies as being technologically dominated, with reason appropriated by technology and theory disconnected from *praxis*. This state of affairs he sees as a recipe for insanity, because societies so dominated lack the capacity for critical reflection. It would be the task of a sustainability ideal to reunite theory and practice with the aim of overcoming the tension between socioeconomic sustainability and long-term ecological security.

Strong sustainability, as conceived in a discourse of ecological restructuring (ER), uses the ecological crisis to reflect on the irrationalities and discontinuities that now pervade modern life as a result of the theory/practice schism, while the weak sustainability of ecological modernization processes (EM) can only seek to overcome the ecological crisis by technical and procedural innovation. Rationality remains captive of technocracy.

Sustainability as ER embodies strong normative and political components, in that participation is taken to be intrinsically valuable and the objectives of economic activity are discursively set within the parameters of ecosystemic and social viability, while EM relies on the setting of limits to resource use through more efficient material and energy resource use and ecologically benign technologies. Participation is of instrumental value and limited to implementation phases of policy development. Integral to ER's moral-practical perspective is a critique of the values, knowledges, practices and institutions of industrial society and their role in social disintegration and environmental damage. The foundation of a viable ecopraxis is knowledge, understanding and practical wisdom, not technical knowhow. With its technocratic focus, EM is more concerned with the technical remediation of environmental damage than with understanding its root causes.

The discourse of sustainable development has already fostered awareness and placed the integration of economic and environmental concerns on the political agenda, but there is yet to occur a sufficient shift in ecological consciousness (Jacobs, 1995a, 7-8). Jacobs also notes that it has mobilized a process of institutional learning in which all manner of policy setters have been pushed to reappraise their policies and policy-making processes, a process which is under way from local government to international agencies like the World Bank. The processes of social learning which are integral to changing consciousness are fostered by participation in environmental decision-making and problem-solving. It is sufficient to note that opportunities for social learning are limited in EM to citizen involvement in environmental remediation measures, such as tree-planting, water quality improvements, and soil erosion prevention.

It is its contestability and hence the impossibility of precisely fixing its meaning (Jacobs, 1995a, 4-5) that precludes the translation of sustainability into a totalizing blueprint. As well, it is its contestability as a subject which lends it to a variety of ecological ideals and consequently inhibits the emergence of an authoritarian politics. On the other hand it is technocratic approaches to weak

sustainability which are likely to fall victim to prescriptive ideology since they are not grounded in practical reason. As improvement and not development is the watchword of ecopraxis, that is to say, improved quality of life, the aspirations of sustainability programmes are more likely to be those which nature and humans can afford.

As a programme of ecological rather than economic restructuring, sustainability can have no precision about beginnings or endings. It can only be concerned with movements towards or away from sustainability standards. We may use environmental indicators to gauge those movements and as a basis for readjustment, but all that is available to social innovators under conditions of uncertainty and complexity is to build onto established trends. They will be trends which exhibit a collective, public moral purpose.

5.9: Conclusion

In this chapter, I have drawn upon a number of thought frameworks which appear to be particularly pertinent to the issues in a *praxis* of ecological restructuring, where the objective is to learn to live sustainably. The objective of the exercise of setting out the elements of a radical green *praxis* has been to illuminate obstacles to sustainability, while determining possible sites for relearning the art of earth-dwelling, to highlight constraints on autonomous development while seeking possibilities for removing those constraints, and at the same time to set down the preconditions for sustainable and creative autonomous flourishing.

The *praxis* paradigm, with its basis in knowledge, understanding and practical wisdom, is brought into service for its critical insights into capitalist political economy. It is used to highlight the relationship between social dysfunction and ecological crisis and to demonstrate that ecological irresponsibility is directly associated with the futile pursuit of radical autonomy both by individuals and institutions. From the paradigm guidelines are identified for defining the tasks of a radical ecopraxis as well as the pitfalls to be avoided, providing a critical understanding of present crises in order to transcend constraints on agency, and to pinpoint possible sites of creative potential and institutional innovation. By interpolating sustainability concerns with the *praxis* paradigm, I have endeavoured to establish the outlines of an ecotopian regulative ideal, which is both modest and radical. It is modest in being tempered by a sense of the enormity of the responsibilities confronting humankind, in its recognition of the dangers of the

uncritical acceptance of ideals, in its recognition of the uncertain nature of the human condition, in its awareness of human fallibility, in its eschewal of defined endpoints, and in its openness to a diversity of possibilities, all of which are underlain by a modest scepticism in the tradition of Montaigne and Hume. On the other hand, its objectives may be described as radical. The ecotopian ideal of strong sustainability seemingly amounts to the simple reinterpretation of the 'quality of life' ideal and yet the implications for political, economic and social systems at all spatial scales are radical. It means assimilating the needs of future generations and nonhumans to market exchange, improving society's capacity to understand and address the problems of ecological crisis, and recognizing the ills of modern life as dysfunctions inherent in these systems. It suggests that existing liberal democracies will have to make room for more deliberative input and that institutions will need to be restructured to encourage environmentally responsible values and practices. The kinds of institutions envisaged will be capable of self-evaluation and self-transformation, and, if necessary, self-supercession.

The political economy approach was enlisted because it gives primacy to the social production of existence and therefore is more capable of grasping the social foundations of ecological problems. It also has a dynamic understanding of social change processes and can grasp aspects of capitalist society particularly relevant to sustainability concerns, generational inequity and the maldistribution of environmental bads and goods. Of particular utility for sustainability issues is regulation theory, especially in assessing possibilities for social transformation in capitalist societies. Regulation theory provides an explanation for the persistence and apparently coherent functioning of a crisis-prone system of production for extended periods. The theory has been used to demonstrate that the present concern with sustainable development is simply an attempt to avert the crisis generated by the inevitable unsustainability of the postwar consensus which coalesced around economic development. The theory also enables us to conclude that social transformation has to be pursued at all levels of social regulation, including social values, norms, practices, institutions and social systems. Regulation theory also provides a useful framework for assessing the viability of extant trajectories of development, the conclusion being that neither neoliberal policy regimes or ecological modernization processes are sustainable, the former being inherently contradictory and therefore unstable and the latter little more than a set of extemporization measures.

Alternative sustainability trajectories are little in evidence. Speculation about their possible forms centres around stores of value which might substitute for surplus value and that alternative social forms might be organized around values such as conservation of the stock of natural and social capital, or wellbeing, or utilization value. So far I am unaware of any speculation about the implications of valorizing utilization value, but one could imagine that the life-time value of an object might internalize any side-effects caused during its production, the costs of its disposal as waste and that, consequently, valuing its real costs might ultimately induce a degree of frugality, thus lowering throughput and waste production.

Social structuration theories have also been important for the revalorization of agency and thus counteracting structural determinism. While it is clear that agency has been circumscribed in modern times, it is also certain that the character of institutions bears directly on its quality and on opportunities for responsible action. It follows that institutions can be structured to favour the emergence of ecologically responsible individuals and corporate entities.

Creativity is argued to be the quality of autonomy most in demand since it is integral to responsible action and social innovation. Removing the blockages to creativity will involve determining the conditions for its flourishing and identifying possible sites for the activation and development of integrated creativity. These might include the "seams" between system and lifeworld (Habermas), the dissonant potential of "edges" (Coles) or perhaps the absurdities of modern life might be used as markers for sites of creative innovation (Maguire).

The requirements of sustainability under conditions of ecological crisis demand that for communities to be healthy and sustainable their citizens must be not only democratically literate but also ecologically literate. A viable civic culture is critical to the generation of common purpose and therefore for attending to issues of the ecological commons. Liberal democracy, with its foundational assumptions of individuality, self-interest and human uniqueness (see Chapter 6.2), may only possess the resources to address issues of the common interest and the long-term to a limited degree.

Finally, the social learning paradigm has been found to be particularly congenial to an era of multiple crises, for conditions of unfamiliarity and uncertainty, and for understanding change in highly dynamic social systems. It is apposite for a time when existing values, norms, knowledges and practices are proving inadequate

in the face of novel ecological problems, problems which are characterized by multiple cause and effect, circular feedback processes and nonlinearity. The social learning paradigm is shown to be particularly compatible with a *praxis* of sustainability. As a recursive model of thought and action, it is suited to situations where learning must be ongoing as is the case under conditions of unpredictability and rapid change. Parallels have also been drawn between the dynamic nature of social learning and ecological systems. Its practical importance is in structuring learning conditions so as to encourage the reconstruction of norms, values and behaviours and the redirection of collective purpose to ends more consonant with sustainability goals.

Although I have drawn out the utility of the abovementioned theoretical frameworks for a green *praxis* individually, in addition to those points of intersection observed in the discussion proper, it is also worth noting that there are sufficient points of congruence between each that there is potential for their integration into a coherent green theory of social change. By way of example, the *praxis* paradigm and creativity theory share a common interest in blockages to actualization. It was intimated that the pursuit of radical individualism and the fixation with secondary creativity bear a direct relationship to ecological irresponsibility and that true social progress, including responsible autonomous development, could only result from the collective exercise of integrated creativity, wherein practical ends have appropriate normative guidance. The implications of these observations are radical to say the least, for they mean the redesign of a number of key liberal capitalist institutions, including the free market and its associated property arrangements, for these are institutions which promote radical individualism and confuse it with autonomy. Ecologically responsible institutions can be expected to foster collective interests while protecting individual autonomy. As a counter to the free market, existing arrangements oriented to the general interest, such as those having stewardship of natural areas or managing the remediation of environmental problems, could be fostered because their generalizable interest transcends the interests of individual participants.

The *praxis* paradigm also has points of intersection with the social learning paradigm in that the guidelines developed for an ecopraxis of sustainability point to the need for institutions to be capable of self-evaluation and self-transformation. In other words, they must be capable of learning and, to be so, they must be structured so as to facilitate learning processes. Consequently, institutions must be open to changing signals and changing external conditions, especially under conditions of

unpredictability and uncertainty. The conclusions from the social learning paradigm have further implications for the design of institutions when married with insights from regulation theory. Thus, while the latter indicates the degree of social transformation and the appropriate objects of transformation necessary for a stable social existence, that is, values, knowledges and practices at all scales and levels in all social systems, the marriage of the former with sustainability theory specifies that reconstruction of the objects of regulation is dependent on the design of institutions which structure learning conditions in the direction of common purpose.

The concern of social structuration theories with the quality of agency also bears directly on the character of institutions. From writings on ecological literacy, it was determined that a precondition for sustainable communities is that their citizens be both democratically and ecologically literate. Thus, another requirement of institutions is that they also be structured to promote these qualities by providing opportunities for participation and ecological learning.

The conclusions reached by employing a regulative framework for understanding processes of social change in capitalist political economies also merit further elaboration for their implications. They reveal that current policy regimes relying on economic instruments and technical innovation are unlikely to produce stable and crisis-free solutions to ecological problems, but that, as a result, there is space for the purposeful shaping of sustainable futures. Capitalism is likely to remain in crisis until attention is directed to issues of social, political and ecological sustainability as well as economic sustainability. It is this continuing state of crisis which presents opportunities. If industrial societies are to surmount a simple accommodation to ecological limits, any restructuring programme must also address existing values frameworks and how they influence production and consumption norms; the values and assumptions underlying institutional arrangements and the kinds of personalities and practices that they foster; and the limitations of existing political arrangements, their philosophical foundations and how these influence policy formation and political processes.

Although capitalism is in crisis, it is probably premature to predict its imminent supercession, but it is well to remember that it is not the only mode of production and it was only with the liberal and industrial revolutions that the pursuit of surplus value came to dominate other modes based around use-value and exchange value. It is certain that the present premise on which capitalist economies operate, that is, maximizing throughput, is unsustainable. It is more likely that an interim

accommodation in which a more integrated range of measures across different levels of social function and different spatial scales will emerge, although probably as a consequence of considerable dislocation and conflict. Gibbs (1996) envisages a scenario where a new mode of accumulation and a new mode of social regulation coheres around the integration of international environmental agreements and protocols, reinforced by national and local legislative implementation and the significant transformation of individual and collective production and consumption norms and behaviours. These trends are already evident, if somewhat distorted. The Montreal Protocol on ozone depleting substances has been relatively successful with the expectation that ozone levels will be repaired in the next several decades. Contrariwise, though, the Kyoto Agreement on Greenhouse Gas Reduction is currently stalled by the reluctance of signatory states to countenance the inevitable reductions in economic growth with all that might mean for political legitimacy. These examples suggest that it may be easier to generate common purpose in areas of environmental concern where there is less at stake. Present international arrangements based on the atomistic nation-state, whose overriding concern is to protect its own interests, are not conducive to issues which demand a significant degree of sacrifice and common purpose. The interests are seemingly so entrenched that it will probably require a significant climatic event indisputably linked to global warming to effect a shift in positions.

At the state and local levels, awareness of environmental concerns has translated into sustainable development policy, which, although couched in the language of ecological sustainability, is usually in actuality interpreted as environmental protection for economic sustainability. Such an implementation deficit indicates, as I argue in Chapter 6, that liberal democracies may have reached the limits of their accommodation with the sustainability imperative. The corporate sphere has also taken on a green tinge, although it is often cosmetic, while the emergence of green consumerism reflects a developing awareness among consumers of their environmental responsibilities. Although green consumerism may steer production towards more environmentally benign production methods and products or reduce the amount of packaging waste, it does little to address the need to reduce throughput. Nevertheless, these trends represent an emergent mode of social regulation and, if pushed, could cohere into a relatively stable interim accommodation and provide a platform for more radical transformation in line with the demands of strong sustainability, centring around the ecologization and moral reform of markets, state and civil society.

CHAPTER 6

LIBERAL DEMOCRACY

AND

SUSTAINABILITY

6.1: Introduction

The emergence of sustainability as a normative goal has profound implications for the political economy of liberal democracy. Firstly, it both highlights and exacerbates the legitimacy problems currently being experienced by liberal democracies; and secondly, it exposes the shaky foundations of some its key institutional pillars (see Wissenburg, 1998, 82-83 on the legitimacy of property and its relationship to liberty). In the context of environmental concerns, sustainability represents both opportunity and nemesis. The challenge can be either benign, leading to reinvigoration, or it can result in less acceptable outcomes, when the value of preserving democratic forms is overridden for environmental ends. Several authors contend that sustainability could be the answer to liberalism's legitimacy problems. Achterberg (1993, 91), for one, argues that the normative political principles which justify liberal democracy may also be important in the legitimation of more far-reaching environmental policies.

Sustainability may also perform another service for green political thought and that is to transcend the disjuncture between a green theory of value and a green theory of agency (Barry, 1996), identified by Goodin (1992), by unifying greens' concern to expand democratic decision-making (as a green value) with particular substantive outcomes, namely expansion of the moral community to future generations and to nonhuman entities. In so doing, sustainability overcomes the charge that greens are rather more concerned with policy outcomes (ends) than with the processes used to achieve their goals (means) making them vulnerable to authoritarian solutions (Mills, 1996). It is precisely because sustainability perceives ecological problems as symptoms of an ethical crisis rather than a set of problems to be solved through technocratic measures that gives it the capacity to link means with ends. Because sustainability is a normative principle, it requires deliberation to operationalize it, and because sustainability demands far-reaching changes in social practices, it necessitates the consent and participation of whole societies. For this reason, operationalizing sustainability "deserves democratic institutions that encourage the active participation of all concerned" (Barry, 1996, 119).

Whether sustainability has the capacity to rejuvenate liberal democracy is problematic, for its resolution turns on liberalism's limitations in responding to the objectives of sustainability, namely socioeconomic sustainability and ecological security, issues of the long-term and the common interest. The view was advanced in

Chapter 1.8 that, as a social order, the proceduralism of liberal democracy is morally thin. As sustainability issues can be said to be morally demanding, liberalism's moral capacity with respect to sustainability needs further explication. The discussion also addresses certain structural qualities which limit its capacity for sustainability.

As a prelude to setting out these limitations, it should be recalled that liberalism's origins are the product of a different set of historical circumstance. We should be mindful of what it was programmed to achieve, namely to override the irrationality and uncertainty caused by religious extremism and to secure individuals in their lives, liberties and property against absolutism and arbitrariness. It is reasonable to argue that, as sustainability issues are largely commons issues, liberal democracy with its theoretical underpinnings in an ontology of individualism and instrumental values, will have difficulty summoning up the necessary resources. This conclusion is reinforced by the empirical practice of the last several decades with respect to progress in environmental protection. The gains of the 1960s and 1970s are being steadily eroded under the influence of neoliberal ideology. Moreover, the observation has been made by Michael Cahn (1995, 132-134) that, even with the two highest office-holders in the United States America expressing profound commitments to environmental goals, policy-makers have proved to be limited in their realization of that commitment by the imperatives of economic growth. Indeed, I would argue that liberal democracy's accommodation of ecological limits through ecological modernization policies has just about reached the extent of its capacity to do so[63].

It is clear that liberal democracies are struggling to progress sustainability goals further than a minimal accommodation to environmental limits. We should therefore try to establish where liberalism's limits lie in relation to sustainability before attempting any assessment of sustainability's capacity to rejuvenate its political economy within the context of ecological restructuring criteria. There are a number of factors inherent in liberalism's ontological, moral and structural framework which derive from its early modern origins and which limit its capacity to respond to sustainability goals.

Firstly, the primacy of individual interests protected by individual rights means that communally-directed policy is achieved with difficulty, the result being

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[63]Wissenburg (1998, 65) suggests that ecological modernization is the only environmental policy compatible with liberal democracy.

that environmental problems can only be partially addressed. Nor is the self-interested individual encouraged either through expectation or social constitution to adopt an other-regarding stance (Mathews, 1996, 71ff.). Consequently, commons issues are debated in terms of a balancing of rights rather than in terms of a common good. The resulting tension between private rights and public good restricts policy options (Cahn, 1995, 16-17). Moreover, the emphasis on rights and values as privately held leaves little space for a moral public discourse, an observation which points to the difficulties that liberalism has as a foundation for a truly public life (Kemmis, 1990, 62). Because there is little or no possibility of generating shared or communal values, there is little prospect of reaching common ground on difficult issues. Kemmis explains the prevalence of shrill protest as a form of public action, the routine blocking of initiatives (whether by conservationists or developers), and the withdrawal of people from public involvement as a function of this latter deficiency. Similarly, Barns (1996, 103) argues the case for a "thicker" form of public dialogue to address commons issues more effectively than does the thin proceduralism of liberal democracy. Ecofeminists lay the blame for the marginalization of collective forms of life and the dearth of public discourse on the public/private dualism of western life, which ensures that the care and responsibility that should be directed to communal issues is confined to the private sphere (Plumwood, 1996, 158-159).

The emphasis on rights is also problematic for human/nature connections. As they are simply procedural rights to regulate relations in a community of political and legal equals, to ensure civil relations between strangers, they make little claim on the moral capacities of community members. By contrast, moral relations between humans and other nature are more demanding, relations for which the rights relations between members of a political community are not equivalent. Relations in ecological communities are much more complex, embracing elements of symbiosis and competition (diZerega, 1995, 27-30). Additionally, it is the interests of species which take precedence rather than those of individuals.

Within liberal democracies there are a number of structural elements which foreclose on possibilities for effective responses to collectively-based problems of environmental decline. Plumwood (1996, 145) identifies the genesis of these barriers in inequality and privilege which act to quarantine areas of ecological concern from democratic attention, with the result that liberal democracy's capacity for adaptability and flexibility in the face of ecological crisis is diminished. Inequality and privilege

operate to restrict information flows and democratic attention so as to hinder the processes of transforming citizen choice into ecologically responsible action. Information flows and communication are obstructed by the hierarchical relations of administrative bureaucracy through censorship and the filtering of information across levels; by polarization and its attendant insecurity; by the manipulation of public opinion (Plumwood, 1996, 145-146); and by the use of symbolic politics (Cahn, 1995, 18-27). Additionally, a shrinking political sphere consequent on the effects of economism and globalization, both processes accelerated by neoliberal policies, means that "the area of life accountable to democratic decision-making and capable of being structured to meet social and ecological needs grows daily smaller" (Plumwood, 1996, 146). This last aspect is reinforced by zealous attacks on collective forms of social choice through the aggressive privileging of private interests.

While the political sphere shrinks, the market sphere correspondingly expands and colonizes areas of life previously little affected by economic imperatives. As previously discussed, the market and its financial instruments, for example, discount rates, are inherently inimical to long-term time horizons. Further, the reliance of elites on growth combined with capitalism's inherently expansionary logic unrelentingly accelerates throughput, compressing time and space, and allowing liberal societies to ignore responsibility to future generations and the need for social reform (Barns, 1996, 102; Press, 1994, 54ff).

Granted that liberal democracies have been more successful than other types of political systems in raising awareness and developing environmental policy (Dryzek, 1996a, 16), there are limits, nevertheless, to the efficacy of oppositional and interest group politics. With public morality limited to interest group politics, any depth of care and responsibility which can be granted to nature and future generations is also missing, while the range of possible policy and individual responses and their efficacy is similarly constrained. Policy instruments such as pollution rights have, according to (Cahn, 1995, 63), only served to "appease" rather than "ease" the tension between liberalism and environmental quality, while market mechanisms have been found to be no more effective than command-and-control measures unless policy prescriptions for better environmental quality coincide with self-interest (Kinrade, 1995). Moreover, as a private ethic of care, green consumerism is clearly an inadequate response to ecological problems, because the emphasis on individual responsibility allows issues of production and technology, which should be subject to

collective debate, to escape democratic scrutiny. Until liberalism can conceive of an enlarged form of moral life, it is restricted to narrowly instrumental forms of public policy for environmental protection (Plumwood, 1996, 154-155).

6.2: To Rejuvenate or to Transcend?

The intention of this section is to evaluate liberal democracy's capacity for further adaptation to the ecological imperatives of sustainability by judging the potential of various theoretical attempts to adapt or refashion the principles and institutions of existing liberalism against the criteria of ecopraxis. These reformulations range across a continuum from the minimal to the immanent to the extrinsic. The minimal critique perceives no problem with liberalism's thoroughgoing anthropocentrism, holds that liberalism can be greened with little modification and that all that is required is to improve the effectiveness of existing institutions. A middle-ranging group of theorists have executed an immanent critique informed by ecocentric principles, which involves reforming the principles and ideals of liberal democracy and refashioning its institutions so that issues of the common interest and the long-term can be given greater prominence. At the other extreme on the continuum are the radical ecocentric theorists whose critic is extrinsic and who seek to transcend existing understanding of the human/nature relationship, arguing that an entirely different ontology and a different institutional framework grounded in an ecocentric consciousness is needed (See Figure 2 below).

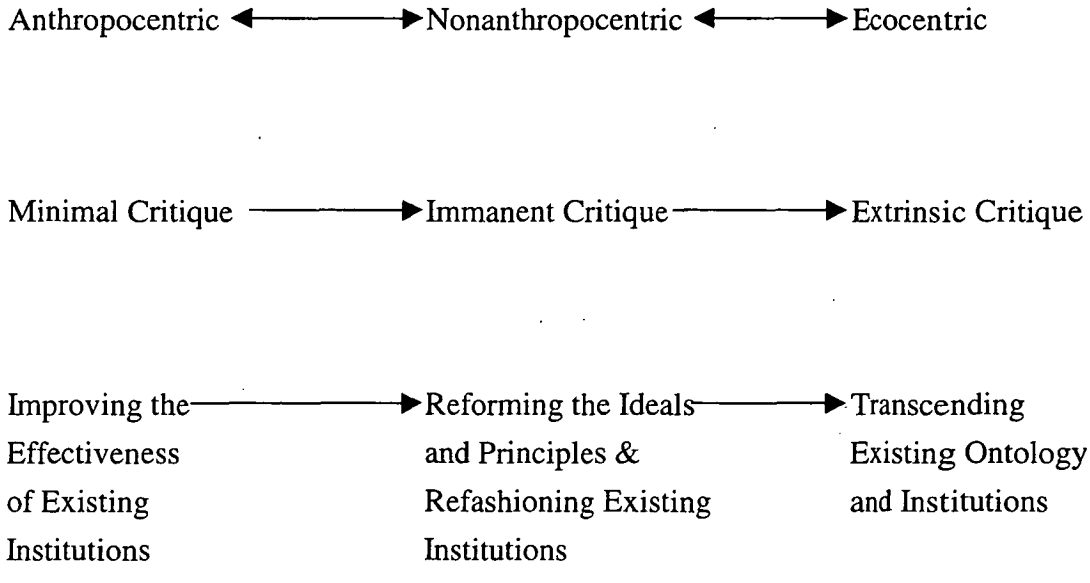

Figure 2: The Environmentalist Critique of Liberal Democracy.

The discussion begins with the group of liberal theorists who accept the fundamental legitimacy of liberal principles and existing political structures. Although they recognize that liberalism is suffering legitimacy problems in the face of ecological problems, some, like Marcel Wissenburg (1998, 2), see these problems as an opportunity to improve the legitimacy of liberal democracy. These attempts at harmonizing liberal democracy and sustainability imperatives principally draw on the distributive justice tradition within liberal political philosophy. Wissenburg's attempt at greening liberalism is possibly the most comprehensive to date. While conceding that environmentalism is responsible for highlighting liberalism's shaky philosophical foundations, most particularly with respect to property justifications, he nevertheless argues that liberalism can be harmonized with ecological imperatives. He sets out to demonstrate that liberalism has the theoretical resources to achieve all that sustainability requires of a political system and consequently that liberalism can be greened even if the bulk of the population does not possess an environmental consciousness. To achieve this objective he formulates the 'restraint principle', a variation of John Rawls' 'savings principle', which ensures justice between generations on the basis that this end is a necessary precondition for a just liberal society. The restraint principle sets limits to the exploitation of the material resource base in the form of conditional rights to scarce goods which should be distributed so that they remain, within the limits of necessity, available for redistribution. In that event the goods in question should be replaced by identical goods or their equivalent, and that being impossible, compensation should be paid (Wissenburg, 1998, 123). The restraint principle prohibits the destruction of the objects of conditional rights, unless unavoidable, say for the provision of some vital need.

The destruction prohibition refers not only to particular objects but also to natural entities, because liberalism recognizes that there are material preconditions for a minimum social life. Attending to these necessary preconditions, which include a healthy environment, is a moral duty because only when these basic conditions have been met are humans freed to be truly responsible moral agents. Wissenburg (1998, 126) argues that the restraint principle thereby accommodates the preconditions for a sustainable society while simultaneously taking care of justice between generations. "It protects the interests of future generations by simply protecting those of present generations" and it accomplishes this end by relying on liberal self-interest or, at least, on mutual disinterest (Wissenburg, 1998, 126, 129).

The restraint principle justifies exploitation of nature only for basic needs, further wants then needing to be the subject of political determination.

While the restraint principle takes care of utilizing material nature, the problem of waste is addressed through an 'inverse restraint principle', which is essentially the mirror image of the former. It prohibits the production of harms unless unavoidable or unless the waste so produced can be adequately absorbed by natural processes, in lieu of which nature should be restored as near as possible to its former condition, or failing that, compensation should be provided (Wissenburg, 1998, 166). Like the restraint principle, the inverse restraint principle is primarily concerned with social sustainability and with ecological sustainability only in so far as it supports the former.

There are a number of assumptions which appear problematic for ecological sustainability. Firstly, these principles assume that ensuring the social minimum will necessarily also be functional for ecological flourishing. Secondly, the assumption that any compensation can be just recompense for those whose life chances have been seriously affected by the production of unexpected risks must also be questioned. Further, the inverse restraint principle is practicable where polluters and pollutants are known and the effects obvious, but for environmentally diffuse and uncertain effects, where the offenders may number many millions, its efficacy is less certain. The principle would easily apply to the obviously deleterious effects of motor vehicle use on city dwellers in congested city conditions but not to motor vehicle users in uncongested conditions, where there are no obvious side-effects. Yet vehicle emissions are a major contributant to the production of greenhouse gases, the effects of which are uncertain and diffuse and may not be fully apparent until some time into the future. In the meantime, social sustainability may be maintained in the present yet at the expense of social sustainability for future generations and long-run ecological sustainability. The case for a level of environmental quality greater than that needed to sustain social sustainability has been put thus:

> The earth's natural systems have limits to the amount of damage they can take and still reproduce themselves over the long run. And though we may not know precisely what those limits are, it is possible that they are much more strict than the environmental quality needed simply to maintain the social minimum for society. In other words, limiting environmental protection to that needed to satisfy the social minimum might produce damage to natural systems whose impact on humans might not be immediately

> manifest, but which would in the long run undermine the social minimum (Taylor, 1993, 271).

The restraint principle thus ignores the time-dependent effects of cumulative use. It is a principle for contemporaneous and proximate rather than uncertain and diffuse effects.

Although liberalism recognizes a healthy environment as a precondition for human moral existence, it reaches its limits with the moral agency of nonhuman entities. Some animals can be attributed the status of 'as if subjects' where the possession of agency and consciousness can be demonstrated (Wissenburg, 1998, 106-114) and therefore may be assigned entitlements. However, where liberalism falls short is in attributing entitlements to collective natural entities, such as species or ecosystems, because "species as such have no interests, no feelings, no consciousness, no plans and, at least from a liberal point of view, it is only the life and welfare of individuals (with interests, feelings etc.) that counts" (Wissenburg, 1998, 179). Recent findings in evolutionary ecology tend to contradict the privileging of individuals over species, as it is argued that it is the species and its bank of genetic information which has most interest in perpetuating itself. Liberalism's emphasis on the primacy of individuals and their interests precludes any accommodation in this respect.

Further criticism can be applied to Wissenburg's greened liberalism for its retention of an unashamedly instrumental stance toward nature, all of which is available for human use. This seems to reflect a Eurocentric bias, where sustainability is being created in an already depleted natural environment and there is rather more concern with the maintenance of the sustenance base[64]. In those parts of the world where ecosystems are relatively more intact and biodiversity a more pressing concern, there is a case to be made for adopting a non-instrumental stance, for recognizing that some environments are insufficiently robust to absorb any human intervention and that some natural entities may have an interest in perpetuating themselves as they are without the benefit of human intervention. The finely-tuned nutrient balances of the coastal heaths of Southern Australia, which support very diverse and complex communities on mostly impoverished soils, for example, just simply could not be substituted or their destruction compensated according to the restraint principle. It is just not possible to replicate the complexity of some

[64]Christoff (1996, 486) makes a similar criticism of the ecological modernization discourse.

ecosystems. Yet to set them aside cannot be countenanced by even a greened liberalism for that would mean valuing them as ends in themselves[65]. Liberalism can take into account the needs of rainforest ecosystems where they impact on the wellbeing of their indigenous inhabitants, yet those natural systems with no indigenous peoples, such as the ecosystems of the Southern and Antarctic Oceans, have no standing, even though there is increasing evidence that their functioning impinges significantly on the regulation of the world's climates and hence on social sustainability. It seems that this degree of interrelatedness and complexity is beyond liberalism's epistemological and moral grasp.

Theoretically, then, the distributive justice principles of political liberalism can account for most of the problems of social sustainability and, according to Wissenburg, ecological sustainability too. If there is a failure of sustainability, the problem resides in society itself, with the genesis of individual producer and consumer preferences. Yet, Wissenburg (1998, 224 -225) is reluctant to allow the pursuit of any strategies which might alter preferences in order that an ecological consciousness be more thoroughly dispersed, for that is the road to serfdom, a nightmare Green Utopia, he says. However, Roger Taylor (1993, 272-273), arguing from a welfarist stance oriented to equalizing opportunities in order to satisfy preferences, contends that, if the social minimum does not yield a liveable world, then additional measures might be taken to conserve natural resources with limits being placed on "the kinds and amounts of preferences that may be satisfied".

While liberalism can theoretically be greened, the fact that liberal democracies continue to be dogged by environmental controversy suggests that there may be more profound structural problems to be addressed before the complex issues of ecological sustainability can be accommodated. The question of preferences, which were earlier identified as a major component of sustainability problems, is particularly taxing for existing liberal democracies as the changes demanded are likely to involve considerable sacrifices and significant changes in lifestyles. This dilemma can also be addressed from within the distributive justice tradition, in this case by means of the liberal principle of neutrality. This is the approach taken by Wouter Achterberg (1993) who argues that, given the impediments of interest group pluralism amd piecemeal change and in order to ground the legitimacy of the

[65]To the contrary, however, Taylor (1993, 280, n.15) contends that to support the provision of the conditions necessary for the social minimum may indeed require that "some quantity of intact ecosystems worldwide" be set aside.

inevitable restrictions, one way of achieving the necessary changes is to remove ecological values from the political agenda and to generate a sense of common purpose based around their fundamental importance. Rawls' principle of an 'overlapping consensus' based on liberal neutrality is a means of circumventing the plurality and possibly conflicting conceptions of the good. It furnishes justificatory principles for the social and political organization of society regardless of individual conceptions of the good. The focus of an overlapping consensus is on generating "common ground", which can survive shifting power balances and provide "a minimal but stable social unity over generations" (Achterberg, 1993, 94).

In view of the threats to moderate scarcity from ecological problems and hence legitimacy, Achterberg is of a mind to supplement the minimal consensus that presently attends liberal democracies to "enlarge the durability of this consensus itself and thus of liberal democracy as well" (Achterberg, 1993, 95). Like Wissenburg, he perceives the present ecological crisis as an opportunity to improve the legitimacy of liberal democracy. To justify the possible restrictions on autonomy arising from restrictions on mobility, from conflicts over property rights, from restrictions on the means of production and hence the market mechanism, he draws on the supplementary services of the 'transmission principle'. While the transmission principle, which contains an injunction to transmit to future generations a world in no worse condition than it presently is, is at base anthropocentric, the injunction can also be extended to nature if its 'self-standingness' is recognized. Justice done to nature then means "leaving it the opportunities to an independent existence and a development of its own" (Achterberg, 1993, 97). Unfortunately this advance violates the neutrality principle, a dilemma which Achterberg (p. 99) sees has to be addressed with the enlargement of conventional liberalism's 'thin theory of the good' into a broader conception of the good, comprising human society, culture and nature.

To achieve a thickened conception of the good would entail a shift, at least to some degree, away from the orthodox liberal understanding of human nature and the relationship between humans and nature. It would not necessarily signal the radical shift to ecocentrism advocated by some theorists, but it might allow humans to assume at least a non-anthropocentric stance in order that interests other than those of individual humans can be routinely accounted for in environmental debate. The interests of communities and of ecosystems might then more easily be considered when dam-building, logging or road-building operations are proposed, for example. Sheryl Breen (1995) envisages that changing the assumptions about what constitutes

humanity and what differentiates humanity from nature can be achieved within the existing framework of liberal thought and that this is likely to be a more fruitful approach than arguing for a new ecological outlook. She argues that it is liberal conceptions of human nature based on individuality, rationality and self-interest combined with a human/nature relationship underpinned by assumptions of instrumentalism, human moral superiority, and the primacy of individual interest that obstructs the progress of environmental protection and the broadening of the environmental agenda (Breen, 1995, 10, 12). However, given the radicalness of ecocentrism and its opposition to atomic, individualistic conceptions of human life and the privileged position held by human interests, it is unlikely to be incorporated into the existing framework of liberal thought. Yet, Breen (1995, 14) thinks that if liberalism were to accommodate ecocentric influences, it might "ease the constrictions now inherent in liberal environmental debate".

To achieve this end, Breen attempts to disconnect humans' superior moral status from their possession of certain idiosyncratic attributes, which have hitherto enabled humans to think of themselves as supremely powerful. The reality is that humans have certain unique qualities, but these qualities do not make them almost omnipotent. As she says:

> humans are not the only living entity that can change its environment to suit its wishes. However, humans do possess decisive power in areas that cannot be excluded from conceptions of human nature or from environmental debate. Unlike other life forms, humans can change their environment globally, on multiple levels and, in some cases, nearly instantaneously (Breen, 1995, 14).

The point is, though, that humans, as moral creatures, have the choice whether to be destroyers or preservers.

Such a modified understanding of human power avoids violating the traditional assumption of human uniqueness, while also allowing consideration of the moral standing of nonhuman entities. Moreover, Breen sees no reason for liberalism to exclude the moral significance of systemic interests as advocated by an ecocentric ethic:

> The conclusion that other life forms and even life systems have interests as well does not violate liberal assumptions but rather forces their expansion. Assumptions of individuality, rationality

> and self-interest can coherently accommodate a broader understanding of what counts as a unit of self-identity, how rationality confers specific forms of power but not moral superiority and how deeply the conception of interest must be applied to nature as a whole (Breen, 1995, 15).

There is clearly scope for rethinking the underlying assumptions/principles of conventional liberalism informed by an ecocentric ethic. The advantage of an adaptive approach is, as Breen herself notes, that questions can "be asked within a theoretical framework that makes comprehension and examination possible" (Breen, 1995, 15). Furthermore, it should be remembered that "the liberal perspective with its premises on individuality, rationality and self-interest, has allowed and encouraged considerable movement towards ecological conservation and, in some cases, preservation" (Breen, 1995, 10), albeit that the environmental agenda has more recently become primarily concerned with the maintenance of the human sustenance base. Yet, it is still a prudent approach to adapt and augment liberalism's partial strengths by seeking to overcome its weaknesses, which have so far largely contained sustainability concerns to risk avoidance.

One particular element of liberalism's conception of human nature is both its strength and its weakness. Self-interest as self-regard was especially important in the struggle against absolutism and the building of the early liberal state, but in its rational egoist guise has become particularly problematic for sustainability. Rational egoism is an especially destructive expression of self-interest because the policies which derive from its ideology encourage short-term, calculative behaviours, such as free-riding, with the result that collective choice and social solidarity are undermined (Offe, 1987a, 534-535; see also Dryzek, 1996b, 92-97 on the destructive effects of rational egoism on democratic politics). As Dryzek (1996b, 105) observes, "any policy that promotes rational egoism in the vicinity of environmental problems is likely to exacerbate the tragedy of the commons and related problems".

Working from the premise that self-interest, as presently expressed, is an incomplete understanding of human behaviour, Gus diZerega (1996a; 1996b) has endeavoured to reharness natural self-interest to the long-term community interest. For liberals, because self-interest is taken to be the natural condition of humanity, it is assumed that the interests of the community will be assured as long as the ability of individuals to look after their own interests is protected first and foremost. The early liberal philosophers of the Scottish Enlightenment - Adam Smith, David Hume and

Adam Ferguson - believed that self-interest would be the human characteristic which could tame the irrational passions which had been in the ascendant during the religious terrors of the seventeenth century. However they did not envisage that it would come to dominate human behaviour. Rather they saw self-interest being balanced against the interests of others by the exercise of the virtue of sympathy (Dryzek, 1996b, 107)[66]. It is this insight from the tradition of evolutionary liberalism (an alternative tradition to deontological and utilitarian traditions) that diZerega employs to reconnect self-interest to empathy, and thence to develop human empathy as a basis for an ecocentric ethic that harmonizes human action with the demands of ecological sustainability.

The argument is developed thus: the models of social and economic analysis with their basis in egoistic rational choice only provide a partial explanation of human experience. Egoism, it is argued, is in fact self-defeating. Self-interest is more than egoism; it requires of the individual to be able to project himself into some future situation and then to choose some desirable course of action. For Smith and Hume, it was this ability which enables us to imagine ourselves in the place of another, an ability arising from the human capacity for sympathy. For empathy to manifest, though, requires the exercise of the rational intellect, which "is needed to grasp or deny relevant similarities" (diZerega, 1996b, 709). Empathy is not, then, an irrational emotion, but an integral component of human reason, the implication being that it is irrational to be egoistic, while empathic relations are definitely rational.

> Rational self-interest, which depends upon being able to anticipate the probable future consequences arising for us from something we do now, requires that we have the capacity to sympathize with others. In both cases the capacity depends on our ability to recognize similarities in beings other than our immediate self (diZerega, 1996b, 710).

Empathy is directly linked to self-awareness, which, when joined with reason, creates the ability to exhibit care for others who may be of no utilizable value or may be unknown. "It proceeds from a thinking, conscious being" (Hume, 1969[1739], Bk. II, Sect. 5, 411). It is humans' self-awareness that enables them to be aware of others and their capacity to care for their future self that endows them with a similar capacity to care for other selves both now and in the future (diZerega, 1996b, 715-

[66]Through changes in meaning, "sympathy" as understood by Hume et al. is now more equivalent of the modern use of "empathy". It is empathy which elicits the emotional response of sympathy. My account will endeavour to use "sympathy" and "empathy" in their correct historical context.

716). But, like all human capacities, to be fully utilizable it must be developed and fostered, or it will wither away (Hume, 1969[1739], Bk. III, Sect. 2, 550). Hence the observation above that egoism is self-defeating. The many unsatisfactory paradoxes of rational choice theory and its derivatives have been noted by Bell (1997), Dryzek (1996b), Haworth (1994), Pusey (1991) and Self (1993) and have led Dryzek (1996b, 145) to conclude that, under its influence, capitalism increasingly produces "grave-digging individuals".

Like all human qualities, empathy is enhanced through use. The capacity for empathy is strengthened with a diversity of communal relationships, which in turn enlarges the sense of self. Those who fail to develop this essential human quality "operate with a diminished level of human attainment":

> As a person sympathetically expands his or her awareness of the relations comprising not only themselves, but other selves as well, they see themselves as members of ever larger and more diverse communities. The result of such identification is increasing respect for nonhuman as well as human life (diZerega, 1996b, 715).

Empathy is assisted by contiguity and resemblance (Hume, 1969[1739], Bk. II, Sect, 11, 370) and for this reason humans have little difficulty relating to other higher primates and other sentient creatures. diZerega argues that sympathy can be expanded to encompass all life and used as a ground for at least a biocentric ethic. Having established this much, diZerega proceeds to develop sympathy into an ecocentric ethic, though how he achieves that end is not significant for this discussion. What matters are the implications of an environmental ethic grounded in empathy for ecological sustainability.

The first observation to make is that, unlike some environmental ethicists who argue that there is no qualitative difference between humans and other animals, diZerega has stayed within the liberal paradigm, maintaining a commitment to human uniqueness, although somewhat modified. The distinction he makes is, not that humans are the only beings with self-consciousness or a capacity for empathy, but that "the human capacity for sympathy is qualitatively greater than with other animals because we are radically more self-conscious than they" (diZerega, 1996b, 715). Consequently humans have the potential to identify with or empathize with a greater diversity of living beings, especially as our knowledge of interrelationships builds.

The second point of interest is that the panoply of policy instruments presently favoured for sustainable development ends - markets, privatization, cost benefit analysis, contingent valuation, managerialism and so on - is unlikely to foster individual empathic development because the identity assumed to be underlying these instruments is the rational egoist. The empathic, caring self is only likely to be fostered through rebuilding social solidarities and by strengthening existing communal arrangements as a bulwark against disintegrative policy regimes.

Thirdly, as empathy develops so does the capacity to care for future generations of others, an ability which is strongly dependent on the depth of community attachment and the sense of communal attachment to both the past and the future. In turn communal attachment over time influences the degree to which one develops a sense of self as a being extending over time:

> [T]he farther into the future our self-interest extends, the more developed our capacity for sympathy must become, since our present situation, and the temptations and pains it presents, is ever farther removed from that imagined being for whom we can effectively care (diZerega, 1996b, 710).

The disembedded individuals of the modern liberal state must seek alternative means of embodiment and connection if they are to develop this vital quality. As diZerega (1996b, 710) remarks: "our discounting of the future is often due more to a failure of sympathy than a calculation of risk".

diZerega has developed an ecocentric ethic from within liberal traditions by adapting one of liberalism's underlying assumptions about human nature, self-interest, to advance a richer understanding of individuality and therefore of human potential, understandings that are more consistent with the demands of ecological sustainability. This enriched sense of individuality more equitably balances the interests of the self with the interests of others so that the sense of self is expanded while the capacity to care for others is similarly enlarged:

> As our understanding of our relationships with others becomes richer and more varied we ourselves become richer, with more dimensions to who we are. We then more fully embody our innate human potential for sympathy and its resulting deep individuality rather than the shallow individuality exemplified by models of economic man and rational choice (diZerega, 1996b, 728),

or alternatively:

> The greater our sense of individuality, the deeper our capacity to realize our connections with all life (diZerega, 1995, 32).

The concept of deep individuality also resonates with Christine Cuomo's warnings about the uncritical acceptance of a feminist ethic of care and the possibilities of loss of self in relationships of care (Cuomo, 1992).

Finally, it is worth noting that Montaigne would have wholly approved of diZerega's approach. Indeed, there are links from Montaigne through the Scottish Enlightenment philosophers: concepts such as the unity of mind and body, the fallibility of reason and a modified scepticism being the most obvious. The notion that sympathy entails both the rational capacity to perceive similarities and an emotional capacity to care sees reason and emotion reunited as Montaigne would have advocated.

Recognizing the moral standing of nonhuman entities is, for liberalism, a difficult step. While Breen relies on modifying assumptions about humanity and human-nature relations and diZerega on an enlarged understanding of individuality, Robyn Eckersley (1996a; 1996b) resorts to the 'rights discourse' as a "means of translating complex moral ideas about intrinsic value into ordinary political language and legislation" and thus to enlarge the moral community. She employs the liberal institution of rights and its underlying regulative ideal, autonomy, in a form of immanent critique with the purpose of connecting ecocentric values to democracy and thereby renovating liberal democratic processes and structures. From an ecocentric standpoint, Eckersley (1996a, 213) argues that it is "time to reevaluate and reframe notions of autonomy and justice in ways that reflect our changed ecological setting and understanding". This objective is best approached by utilizing existing regulative ideals and institutions in order to "challenge and gradually transform not only the form, style and content of democratic deliberation but also society's relation to nature". The rights discourse has played a pivotal role in strengthening democracy by extending the traditional political and civil rights guaranteed by the liberal revolutions, to subsequently include social and economic, and then development rights. There should then be no impediment to the emergence of a fourth generation of environmental rights to reflect the environmental revolution of the late twentieth century (Eckersley, 1996a, 220; 1996b, 177). She proffers the view that the

development of rights for nonhumans and environmental rights for humans would "furnish a further rationale for more substantial social and economic transformations towards ecological sustainability" (Eckersley, 1996b, 178).

The use of the rights discourse is further justified by the argument that the connection between ecocentric values and democracy can be made at the level of principle so that environmental rights for humans can immediately be used to address 'democratic deficits', identified as the under- or non-representation of the interests of non-citizens and the environmental welfare of citizens, while the inbuilt bias against long-term generalizable interests also makes rights an attractive proposition (Eckersley, 1996a, 215). Environmental rights can serve to alter the established framework of environmental debate in favour of environmental interests, thus having an effect similar to changing the parameters of the received view of human nature.

As an existing and accepted theoretical framework, the rights discourse enables the comprehension and debate of the difficult notion of attributing moral standing to nonhumans in that it provides the language framework within which to argue for the autonomy of nonhuman entities as agents in their own right (Eckersley, 1996b, 179). The principle of autonomy or the freedom of all living forms to unfold and flourish according to their own 'species-life' is applied to arguments for a more inclusive notion of autonomy and as a moral starting-point for the extension of rights to non-human entities. In mounting a case for humans to routinely account for the interests of nonhuman entities, Eckersley argues from conditions already existing in liberal democracies which allow for the imposition of restrictions on how people may exercise their entitlements in order that autonomy may be maximized for all citizens. Similarly, to arrive at a more inclusive notion of autonomy, she argues from the preconditions that enable autonomy to be exercised. For both premises to be realized moral standing must be generalized to all natural entities, both individual life forms and such natural entities as species and ecosystems. This advance in understanding can be achieved if, moral standing having been accorded to human and nonhuman individuals, the same moral priority can be assigned to the conditions of enablement, including ecological conditions. The implication for democratic citizens, individually and collectively, is that they should arrange their social systems so as to permit all entities to flourish, while the range of liberal entitlements would have to be realigned with the demands of ecological sustainability (Eckersley, 1996b, 223). An early subject for revision under this schema would be the moral justifications for Lockean property rights. The use of a more inclusive notion of autonomy therefore

represents an advance on minimalist human-centred arguments from the need to assure socially minimum environmental conditions with their base in welfare liberalism, which are simply not possessed of the theoretical resources to account for issues like biodiversity or ecological integrity. Yet it does not take a great leap of imagination to effect.

Notwithstanding the efficacy of an adaptive approach, the rights discourse is not unproblematic for ecological sustainability. Liberal rights have been criticized by Benton (1993, 203), because they ignore the social and ecological embeddedness of individuals. The ecocentric critique, which holds that it is ecological interrelationship that constitutes the field of moral responsibility, is particularly problematic for the utilization of rights in environmental protection. Yet, Eckersley is reluctant to abandon rights because of their "protective, educational and transformational benefits" (Eckersley, 1996b, 192). Since their protective qualities have been instrumental in furthering minority interests, they should be able to do the same for ecological interests. She therefore enlists Warwick Fox's 'autopoietic intrinsic value theory' to overcome the problems presented by the individualism of rights entitlements. His is an argument for the attribution of intrinsic value to all those living individuals and entities which have a primary interest in "the regeneration of their own organizational activity and structure" (Fox, 1990, 171-172). The difference is that the entitlements available to autopoietic entities are relational and not individualistic, the rights of individual organisms being "framed in the context of the requirements of larger autopoietic entities, such as ecosystems, in ways which maximize the opportunities for both individuals and ecosystems ... to flourish" (Eckersley, 1996b, 189).

Nevertheless, although an expanded notion of autonomy furnishes broad moral principles for human action, it runs into trouble with political-legal, definitional and other practical problems, not the least of which is the difficulty of defining the exact boundaries of ecological identities, which often nest or overlap. Similarly, the problem of representing the interests of nonhuman entities may be overcome at least to some degree by the appointment of political/legal guardians as suggested by Mills (1996, 110-111). However, that will not counter the tendency in polyarchical liberal democracy to disaggregate and downgrade the problems of ecology to the status of simply another interest (Dryzek, 1996a, 19). It must be concluded then that the rights discourse can be used influentially in the case for human environmental rights and even animal rights with little extrapolation from

existing human rights; however, it reaches its limits with collective entities (Eckersley, 1996b, 190). Eckersley can only conclude that general ecological sustainability will have to rely on responsible human action through the precautionary principle and general sustainability planning (Eckersley, 1996b, 193). The weakness here is the difference in orientation identified between weak and strong sustainability - whether the objective is the maintenance of growth within environmental limits or the maintenance of ecosystemic and social viability. General ecological sustainability turns upon the degree of intrinsicality ascribed to the natural environment.

This attempt to rejuvenate liberal democracy through an expansion of the scope of rights and the extrapolation of rights to nonhuman entities informed by ecocentric insights is consistent with the adaptive criterion of green *praxis*. Liberal rights have been instrumental in furthering democracy through protecting the political, civil and socioeconomic conditions necessary for citizens to exercise political control. As Eckersley (1996a) remarks, the biophysical conditions of political and social life should be accorded the same importance. Biodiversity can be indirectly secured, at least to some degree, through environmental rights; however, more assured protection for ecological entities is dependent on further theoretical recovery of the notion of autonomy in preference to the privileging of individuality in order to strengthen and elaborate moral responsibility for autonomous development. Shifting from individuality to autonomy as the principle assumption underlying understanding of human nature would allow more profound points of continuity to be made between humans and other nature; thereby amplifying the communication between human and natural systems seen by Dryzek (1996a) as necessary for institutions to be ecologically rational. Finally, instantiating environmental rights in public environmental laws or perhaps in constitutional safeguards could act as a catalyst for more forthright action on global sustainability problems, if governments were required to be more effective in ensuring the protection of their citizens' rights to a healthy environment. Eckersley (1996a, 230) also envisages citizens' environmental rights as a vehicle for overcoming the implementation deficit which currently besets much environmental regulation and administration, while Mills (1996, 108) regards environmental rights as a basis for changing consciousness.

While Eckersley relies on arguments from principle to rejuvenate liberal processes and structures, John Dryzek takes a more systematic approach to the institutional reconstruction of liberal democracy. His can be characterized as a

'quasi-extrinsic' approach in that he remains inside the liberal paradigm but looks beyond it to the principles of ecological democracy to criticize existing institutions and to search for more effective institutions, effectiveness being a measure of the degree to which communication between human and natural systems is promoted. Dryzek's ecological democracy is informed by two principle components, ecological rationality and communicative rationality. The former is used as a standard against which to judge the capacity of social institutions to adapt to changing environmental conditions (Dryzek, 1987, vii-viii), which largely involve problems of a commons nature (p. 11). Social choice mechanisms which have the capacity to respond to problems with a high degree of complexity and uncertainty are characterized by negative feedback mechanisms, coordination across different problems and actors, and particular performance capacities of robustness, flexibility and resilience, which enable them to respond to and correct for changing internal and external conditions. Polyarchical liberal democracies and their constituent social choice mechanisms are judged against these criteria to be ecologically irrational. Negative feedback is limited to oppositional politics; coordination is limited by the emphasis on individual interests; liberal democracy's atomistic tendencies mean that complex problems can only be treated in a disaggregated manner and responses only piecemeal; while resilience is compromised by short-term electoral cycles and a "general addiction to the 'political solvent' of economic growth" (Dryzek, 1996a, 16). General failure across the criteria of ecological rationality means that liberal democracies distort the signals emanating from natural systems and this plus the rigidities identified previously means that they are insufficiently adaptable and flexible in the face of social and ecological crisis.

The second component of ecological democracy, communicative rationality, defines political systems where communication between subjects is said to be uncoerced, undistorted and engaged by competent individuals. The communicatively rational polity is distinguished by attention to 'generalizable' interests pursued through rational discussion, in contrast to liberal polyarchies where particular interests employ instrumentalizing strategies to protect and cement their interests with the result that any consensus generated can only be a less than satisfactory compromise between competing interests (Dryzek, 1987, 202). The practical reason of communicative rationality - through attention to shared norms, values, interests and purposes - acts to facilitate coordination across actors and problems, the lack of which results in commons degradation and problem displacement, issues which liberal democracy is only fitted to address in a limited way. This discursive

rationality, which takes political form as discursive democracy, Dryzek (1990, Ch. 3, esp. p.70) holds, is better able to cope with complex problems because it is oriented to "intersubjective understanding and the generation of action-oriented consensus".

Notwithstanding these apparent strengths, a discursive democracy is not guaranteed to be able to address problems of ecological sustainability even if it can accommodate complexity. To be able to contend with the uncertainty and complexity of human/nature interactions, social choice mechanisms must also embody a purposeful orientation to signals emanating from nature. A precondition for such an orientation is the acceptance of agency in natural entities, which are recognized to possess an interest in their self-realization (Mathews, 1991, 98). Such an acknowledgement necessitates the design of institutions in which communication is undistorted by the kind of instrumentalizing strategic action which privileges particular interests. These institutions promote communication between human and natural systems more effectively than those that approach nature instrumentally. The appropriate attitude underpinning ecologically communicative institutions is expressed as a respect for signals emanating from the natural world similar to that which we would accord communication emanating from human subjects (Dryzek, 1996a, 20-21). A polity which is both discursive (oriented to common purposes) and sensitive to ecological signals is an ecological democracy. It is both communicatively and ecologically rational.

Like Eckersley, Dryzek is acutely aware of the demands of *praxis*. His is probably the most succinct and purposeful body of work oriented to the development of a green *praxis*. His seminal work, *Rational Ecology*, has its foundation in Aristotelian "practical reason" and the Habermasian critique of the domination of modern life by instrumental reason. Subsequently the communicative rationality aspects were more fully developed into discursive democracy and thereafter these insights evolved into the ecologically communicative ideal. It is this ideal which Dryzek employs as a regulative touchstone to highlight the deficiencies of existing democratic liberal institutions and as a normative guide for the design of new institutions.

Where ecological democracy is used as a regulative ideal, the object would be to maximize effectiveness of communication between human and natural worlds. Consequently, where communicative effectiveness is the measure of the output of institutions (rather than efficiency of throughput), the implications for the form and

scale of existing institutions are considerable. The size and shape of institutions should match the scale and the nature of problems. The small-scale, decentralized, self-reliant living model is appropriate for communities which can respond to and look after their local environment, while problems of a global nature will require a global response.

The ecologically communicative ideal exposes some "gross failings" in liberal democracies principally to do with distortions to signals from the environment. The hierarchical arrangements of administrative bureaucracies distort signals through censorship and filtering of information across levels, while "autistic" markets respond only to human preferences expressed solely in monetary terms (Dryzek, 1996a, 25-26). Markets will punish market actors by curtailing profitability when these actors seek to take other values into account (notwithstanding the fact that some consumers may adopt green consumerist practices). The scale and scope of existing mechanisms also fails to match the size and scope of ecological problems. The globalization of markets, for example, overwhelms local signals and international competitiveness is used by sectoral interests to suppress local opposition to the overexploitation of local resources.

On the question of effective *praxis*, like Eckersley, Dryzek (1987, ix) makes use of an existing language framework, the discourse of rationality, arguing that one has to use the language that one is trying to transcend. Accordingly, he puts the language of the dominant instrumental-analytic rational discourse to use in dissecting present social choice and to demonstrate that existing forms fail when evaluated against the criteria of ecological rationality; they are subject to a universal failing and that is the tendency to displace rather than solve problems (Dryzek, 1987, 12-13). As a counter to instrumental rationality, he draws on the alternative tradition of practical reason, argued by Habermas to be underdeveloped in modern societies. Practical reason is more suited to problems of the ecological commons because it "involves the rational scrutiny and generation of purposes as well as means, and proceeds pedagogically and communally rather than instrumentally and privately, ... accepting only a participatory, discursive kind of collective problem-solving" (Dryzek, 1987, 13). Possible sites where a communicative rationality can be engaged are in the public spheres of civil society. Here discursive associations, separate from the instrumentalizing influences of state and market, may be "constituted around particular risks, social problems or policy issues" (Dryzek, 1995, 10). Thus a local community whose watershed is at risk of contamination from forestry operations may

organize to gather evidence against such state-sponsored and ecologically damaging activities. It is this kind of communicatively rational action which keeps instrumental action in check and which can contribute to the development of an autonomous civil society that countervails the dominance of state and market spheres and leads to better integration of political and ecological communication.

Although Dryzek himself has warned on several occasions of the dangers of using ecology for a single blueprint (see Dryzek, 1987, Ch. 4 *ex parte*; Dryzek, 1996a, 18), ecological democracy, being deliberative rather than instrumental, is theoretically inherently antithetic to blueprints or prescriptive ideologies. By the same measure, neither does it predispose to an authoritarian politics. As its objectives are the enhancement of existing democratic qualities and ecological values (Dryzek, 1995, 1), its starting point is in actually existing democracy, and ecological democracy can thus be said to be more concerned with processes than with end-states. Further, being non-prescriptive should as a corollary encourage a diversity of ecological ideals and goals. Lastly, as ecological democracy is grounded in practical reason, it should conduce to self-critical modes of responsible action. Institutional designs which embody the principles of an ecologically democratic ideal would, as a matter of course, include mechanisms for ongoing self-evaluation. This quality is essential if institutions are to be capable of flexibility and resilience in the face of internal and external structural perturbations. The rigidities of liberal democracy mean that it is ill-equipped in this respect (Dryzek, 1987, 245-246). Bureaucratic administration and legal systems frustrate structural change while markets punish governments which attempt social transformation likely to threaten economic interests. Moreover, existing self-reflective mechanisms - ombudsmen, commissions of enquiry and so on - are found to be quite vulnerable to the influence which can be exerted by entrenched interests. They may find themselves under-resourced or subjected to systematic criticism when perceived to threaten such interests.

On the whole, ecological democracy is predisposed to iterative rather than formalist institutional innovation (Dryzek, 1987). This is not to say that *de novo* design is not necessary. Indeed, the capacity for continuous innovation is an essential characteristic of the adaptive society. It is just that ecological democracy does not conduce to wholesale, revolutionary transformation of the 'clean-slate' sort. The extent of ecological democratization processes can be judged by the extent to which the political franchise and scope and the authenticity of democratic processes together with the degree of political greening have progressed. The latter process

may involve the degree to which the interests of nonhuman entities are recognized and represented or whether an increasing sensitivity to a safe, clean environment for human interests is a political objective (Dryzek, 1995, 1). However, for human development to be ecologically sustainable in an era of global risk, nonhuman interests must be formally configured into democratic political arrangements. The risks are simply too inordinate to leave the emergence of green democratic structures to evolutionary chance.

We are then left with the perennial problem of ecological consciousness. Dryzek's position is that the structure of political systems makes a great deal of difference to the likelihood of green values being realized (Dryzek, 1996a, 12-17), that is, that green values need green structures. The present political economy of liberal capitalism embodies certain imperatives to do with maintaining a profitable business environment which influence the system to foster values synchronous with an instrumental-analytic rationality and which produces a certain type of personality, the rational egoist (Dryzek, 1996b, Ch. 5). The qualities of the rational egoist, short-term, calculating, competitive and egoistic behaviours, are incompatible with the qualities of the responsible and other-oriented ecological self. It is precisely because there are limited prospects for the reconciliation of economic and ecological values that Dryzek advocates that ecological democratization processes be instigated and supported in civil society in opposition to state and economy and that the democratic forms so instituted take not only an oppositional stance but that they be used to reclaim control of particular areas of life from the state's ambit (Dryzek, 1995, 9-10; Dryzek, 1996c, 480; see also Dryzek, 1996c on the benefits of an exclusionary state for democratization; but see also Davidson, 1995 on the limits to the practice of ecological democracy in a corporatist state). It is therefore in civil society's autonomous spheres organized around "particular risks, social problems or policy issues" and most particularly when issues of social sustainability are integrated with issues of ecological sustainability that the emergence of ecological consciousness will be facilitated.

The ecological self or ecological personality is a primary focus of the extrinsic critique of liberal democracy. That this critique is concerned with questions of selfhood relates to its stance on what is seen as the structural failure of liberal democracy, which is underlain by factors intrinsic to its philosophical and moral foundations. The systemic faults identified by the extrinsic critique are used to demonstrate that contemporary responses of liberal democracies to issues of the

ecological commons and future generations are ultimately limited unless the philosophic foundations of liberalism are also reworked. The themes that consequently suffuse this radical critique revolve around questions of ontology, identity and citizenship, the morality of public discourse, and issues of the political and social structures likely to foster ecological consciousness and responsible human development.

Liberal democracy is perceived by this critique to have failed both democracy and ecology (Plumwood, 1996, 134). It is this recognition of liberalism as a failed expression of the emancipatory project together with its increasing vulnerability (Barns, 1996, 103) that provides the impetus for alternative radical democratic designs. The radical ecocentric critique of liberal democracy interprets its failure to respond in anything but a limited way to the ecological crisis as a measure of its democratic shortcomings, while the ecofeminist critique posits the western project of rational mastery, and its dualisms of public/private, mind/body and reason/nature, which have shaped its institutions and allowed antidemocratic and antinature elements to dominate, as the cause of democracy's partial subversion (Plumwood, 1996).

In ecofeminist discussion the public/private dichotomy's role in democratic deficits is explained by the positioning of economic activities in the private sphere, as a result of which production and consumption are largely exempted from democratic scrutiny. Because economic management is excised from public discourse, so too are large areas of ecological impact (Plumwood, 1996, 145-147, 153). Under the influence of an aggressive economic liberalism, with its privatization, deregulation and marketization ideologies, public responsibility for the provision of collective life recedes and with it the public sphere: "[P]rivate interests are emphasised to the point of irresponsibility and many of the forms of collective life essential to the flourishing of nature lead an increasingly precarious and marginalized existence" (Plumwood, 1996, 146).

Additionally, Plumwood identifies endemic privilege and growing inequality, accentuated by neoliberal policies, as a hindrance to communication and information flows, distorting decision-making and further reducing responsiveness to social and ecological dysfunction. "[I]nequality acts both as a barrier to information and feedback on degradation and its human impacts, and to responsiveness to this information" (Plumwood, 1996, 140). The social polarization that accompanies

inequality creates instability through insecurity and dependency compounding the distortions to information flows resulting from censorship, the filtering processes in administrative hierarchies, media manipulation, and symbolic politics.

The downgrading of public life is interpreted by feminists in part to be a function of individual identification with the private sphere, with the public life of citizenship and politics only instrumental to the private. Thus the radical disjunction between a rational, instrumental public sphere and an emotional, empathic private sphere means that actually existing liberalism cannot generate public moral regard. At best public expressions of care and responsibility for nature and future generations are restricted to narrowly instrumental forms of public policy (Plumwood, 1996, 155), while social expression is limited to protest politics, interest group politics, or green consumerism. Those who attempt to expound an ethic of care are destined to clash with the instrumental rationality of the public sphere. They will necessarily be perceived as extremists, unless practices of care and responsibility are extended to those areas from which they are now excluded, production/consumption, public life and nature.

Liberal democracy's narrow perception of citizenship as political representation and the concomitant non-recognition of economic and ecological citizenship is located in a form of mind/body dualism. This is explained by liberalism's limited recognition of agency in political representation but also its ignorance of agency in the material sphere of economic production, household and ecological life. Remedying the underdevelopment of democracy is thus located in extending citizenship and thus responsibility to these excluded key areas of the economic sphere, the household and areas of collective ecological concern. Similarly, the reinvigoration of political community is assumed to be the key to a democratic order in which individual identity is expressed as both public and private virtue.

While furnishing fruitful insights into the nature of democratic deficits and the ecological failure of liberal democracy, the dualisms concept can also yield insights into the viability of sustainable development strategies. As a number of authors (including Barns, 1996 and Kinrade, 1995) have observed, the response to sustainability imperatives has generally occurred simultaneously with the ascendancy of market liberalism, with the result that the challenge of the *Brundtland Report* of 1987 has been met, not with the collective social response that it advocated, but with

neo-classical free market environmentalism (Barns, 1996, 118). As Barns points out, market instruments are useful for guiding individual actors into more environmentally acceptable behaviours, but they are devoid of the conceptual resources to forge common interests and purposes. He warns that the resources to deal with commons problems will only be found where there is a sense of shared identity and common purpose.

Free market environmentalism also favours privatization of commons resources on the understanding that private owners are more likely to assume responsibility for their welfare. This strategy continues dependence on the Lockean individualist basis of property formation which has proved extremely doubtful in resource conservation (Kinrade, 1995). It perpetuates the denial of the dependence and legitimation of property formation on collective forms of social life (Plumwood, 1996, 148), the case for which had been argued by Kant in the eighteenth century. Free market and privatization strategies not only compound ecological irresponsibility, but they also prevent the generation of common purpose and identity. Rather, these policy instruments, grounded as they are in assumptions of rational individualism, cannot produce community-minded and ecologically responsible individuals but only self-interested rational egoists and "end up producing more of the problems they set out to solve" (Dryzek, 1996b, 69-70). Additionally, as the negation of ecological interrelatedness is instrumentalized in the structures of property formation, the market and production (Plumwood, 1996, 149), the deployment of conventional neoliberal economic instruments in EM processes can, as earlier concluded, only represent a defective response to commons problems.

Moreover, the reason/nature dualism underpinning contemporary liberalism, in privileging 'mind-people', managers and professionals, will tend to favour technocratic (that is, rationalistic, managerialist) responses to sustainability problems. Those social groups which continue to be associated with the body and things corporeal - women, children, manual workers and other outsiders - will also continue to be excluded from rational decision-making. The point has also been made that the purposeful extension of participation, as advocated by normatively-inspired sustainability strategies, will not necessarily mean the inclusion of those who most need to be included: "Extending formal participative structures may mean little unless we can rework the dualisms ... and reconcile the anciently divided spheres of nature and culture". These are the "increasingly urgent and convergent tasks of

creating a society in which both human freedom and nature can flourish" (Plumwood, 1996, 163; see also Pateman, 1989, 220-223; and Phillips, 1991, 42-46).

The radical critique of liberal democracy furnishes a public ecological ethic, which, it is argued, is a precondition for the solution of commons problems and without which any expressions of care and responsibility can only manifest in the private sphere. For this reason, green consumerism can only represent a limited demonstration of ecological care for it relies on the responsible behaviour of the private individual, whereas the problems of resource use should in fact be the subject of public consideration around issues of technology and production. The confinement of responsibility to individual consumer and producer preferences means that those areas relating to the economic sphere, which should be subject to democratic control, remain unremarked. Individual producers may attempt to act responsibly but they remain at risk of market punishment.

The extrinsic critique of existing democracy posits a radically responsive alternative, which has limited pretensions to practical implementation. It does however perform the role of regulative ideal against which to appraise the democratic effectiveness and ecological responsiveness of existing democracy. Its public ecological ethic substantially enlarges understanding of the arenas of responsible action, which I have established as the ethical/moral core of green *praxis*. It envisages the democratic community as more than simply a procedural republic; rather it is conceived as a moral community.

Feminist insights into the nature of dualisms, which inform radical democracy, can be used to measure the ecological effectiveness of conventional sustainability strategies grounded in rationalism and a private ethic of individualism. As an ideal it highlights the structural flaws which liberalism has inherited from the rational mastery project and the rigidities that they generate. It reveals that overcoming liberal democracy's democratic and ecological failure is not a simple matter of fostering ecological consciousness, tinkering with the odd assumption, or refashioning its institutions. At base, reuniting culture and nature and thus addressing the difficult and complex problems of ecological sustainability is ultimately dependent on transcending liberal democracy's foundational assumptions. For Barns (1996, 126-127), the reconstruction of the emancipatory tradition as a thicker form of public dialogue also requires the retrieval of metaphysical and

spiritual resources indispensible for the formation of selfhood, community and public life in an ecologically responsive democracy.

A related facet of the concern for contemporary liberalism's dearth of moral resources is its capacity to furnish the social conditions necessary for the emergence of an ecological consciousness. Its deficiency in this latter respect is attributed to the priority accorded to self-rule and the concomitant lack of an intrinsic concern for others (Mathews, 1996, 71). Liberal institutions promote an abstract individualism and not a culture of altruism, empathy or the non-instrumental identification with others and their interests. In order to generate different modes of ontology and identity as bases for the development of empathy with other humans and nonhumans as well as forms of society suited to the shaping of human identity along lines more conducive to empathic relationship, Mathews proposes ecocommunitarianism as the primary political prerequisite. She uses the ideal of the 'relational self' to argue for particular sets of political conditions likely to foster empathic development. The identity of the relational self is determined by systems of relationships and it these to which priority is given rather than to individuals. Power is also vested in the relations of communication between the elements of the structure rather than in individual nodes. In the relational model, it is the quality of communication which is important for empathic development.

The relational communities in Mathews' model are distinguished from liberal democratic communities in the means of self-realization: "[T]he end of liberal forms of democracy is to free individuals from political domination and to enhance their sense of autonomy, while that of community is to bring individuals out of self-absorption, into sympathy with others" (Mathews, 1996, 82). These are socially binding communities with obligations and responsibilities and no room for the radical autonomy of liberal individual freedom. Autonomy in a relational community has to be redefined as 'freedom for' rather than 'freedom from'.

Notwithstanding the problematics of the notion of community identified in green political discourse (see the discussion by Kenny, 1996), Mathews' attempt to give her model political substance does address an area largely ignored in the same discourse, namely the transnational political economy. The lattice model of communities is used in prototypical fashion for a *praxis* of global resistance. The increasing subordination of social life to the imperatives of globalizing capital is extrapolated to a future scenario of nation-state impotence and corporate dominance

of political and economic power - a kind of corporate feudalism, where first allegiances of employees are to corporate employers. Employees are seen as medieval vassals, while those whose services are not needed are discarded. Her defensive response is a relational model of political structure based around transnational networks of resistance. The rationale for their potential effectiveness is grounded in the prospect of reproducing, via resistance networks ranged across many countries, sufficient pressure applied at the cash-till to exert some control on transnational corporations which, in her scenario, with the withering away of the nation-state, come to stand outside the law.

There is of course no reason to wait for this worrying trend to become fully established. There have been recent instances of the strategy's effective use, namely, the boycott of Shell's retail outlets in Europe which forced the abandonment of the disposal by sinking of the Brentspar and a review of that particular method of disposing of decommissioned oil-rigs. Similarly the rainforest action groups which link people from developed countries with indigenous peoples reliant on the rainforest constitute another such international network which can pressure governments that allow and encourage rainforest destruction and those that permit the import of rainforest timber (Thompson, 1996, 42).

Janna Thompson (1996, 37) too, perceives potential in networks which promote transnational, cooperative relations of mutual obligation and practical relationship. These connections "can encourage people to sympathise with others and regard themselves as having a responsibility for each other's wellbeing". They are relational networks which have the possibility of transcending the insularity of conventional communities. Thus Thompson divines in contradictory globalizing and localizing trends, that is, the defense of community and cultural integrity against globalizing forces and the countering trend towards transnational institutions, the rudiments of opportunities for the creation of links and therefore transnational communities of mutual concern, responsibility and practical aid (Thompson, 1996, 41-45). These too are communities grounded in practical reason.

6.3: Conclusion

Ecodemocrat critics have mounted a telling critique of liberal democracy's failure to further processes of democratization and to ensure ecological sustainability. Radical ecodemocrats would attempt to transcend liberal democracy by constructing

a democratic polity based around a relational ontology on the ground that its philosophical foundations need to be reworked and the ontology of radical individualism replaced with an ontology of the relational self. The approach taken by other ecodemocrats, that is, of partial modification of its philosophical assumptions and regulative ideals, is less likely to be subject to the problems of revolutionary action implicit in any course of radical utopian change.

The test of any programme of reform or restructuring is its prospectivity for transcendence of what are the most pressing and intransigent obstacles to progressing environmental debate and sustainability. These problems largely resolve themselves into issues of structure and issues of agency. Structural problems include the expansionist logic of the capitalist market economy and its constituent imperatives which also limit the potential of the state to assume environmental responsibility; democratic deficits which account for the non-control of production and consumption decisions; implementation deficits in existing environmental protection legislation; and a proneness of liberal democratic political economy to short-termism and problem displacement. On the agency side, difficulties are experienced with population policy and planning, a rampant individualist consumerism, restricted dispersal of an ecological sensibility, and increasing inequality.

From regulation theory the conclusion was reached that sustainable modes of production would only obtain if sustainability was pursued across all the spheres of life, economic, social, political and ecological, and at a variety of social and spatial scales. Given the limiting conditions outlined above, namely the limitations from *praxis* and the structure/agency difficulties, the questions to be asked of the modifications to liberal democracy proposed by ecological theorists are:

Can the modifications overcome the most pressing obstacles to sustainability?
To what extent will they contribute to general sustainability?
Which reconstructive proposals are most prospective?

Given the seemingly overwhelming and entrenched nature of the impediments, the most likely successful reconstructive programme lies in extensions to the existing structure of liberal democracy. Hence arguments for an extension of the rights regime to rights to a healthy environment or arguments from equity, both established discourses within liberalism, would most probably find greater purchase than reformulating its philosophical foundations. As Eckersley notes, environmental

rights would provide more legal force for existing environmental legislation, thus addressing the problem of implementation deficits. Their adoption might also act as a brake on the expansionist logic of capitalist accumulation (presently largely unfettered as a result of the prevalence of neoliberal policy influences) and, by extension, modify production and consumption preferences. Unfortunately individual rights cannot generate the common purpose necessary to address commons issues, although they can act as a priming agent in extending environmental awareness and understanding. This shortcoming may be partially remedied by the extension of rights to collective entities. Rural communities, for example, might have a collective, legally enforceable entitlement to water catchments, uncontaminated by pesticides and herbicides from forestry, agricultural or mining activities.

The distributive justice tradition within liberalism has been shown to be prospective as a foundation for arguments concerning the liveability of the planet. As a healthy environment is taken to be a precondition for moral development, either from the restraint or inverse restraint principles, or from the need to ensure a socially minimum condition, these are arguments which can overcome existing implementation deficits while a prohibition against the production of harms might see the imposition of more stringent legal curbs and the onus of proof placed on polluters. It would also see the more purposeful inclusion of population issues, presently avoided as too difficult, on the political agenda. In particular, the unsustainability of some urban concentrations might similarly receive more concerted attention if these principles were invoked.

Such extensions to existing liberal concepts would serve the same function as the addition of a skylight, bay window or conservatory to a seemingly outmoded building, that of opening up previously latent potential occluded by the dimness of the old spaces. In these enlightened spaces might be found the latitude to begin consideration of alternative interpretations of liberalism's foundational principles and ideals - autonomy, individuality, self-interest, human uniqueness, justice and equality - and thence to expand the moral community, which, it is generally agreed among ecocentric theorists, is a precondition for the ecologically responsible society.

However, it must be said that the genesis of such a moral progression must arise from practical experience, reflection and democratic participation. This means inaugurating opportunities for citizens to discern and comprehend the points of contiguity, continuity and resemblance between themselves and other natural entities

in order to generate empathic relationships and bring liberal self-interest to completion. Initially these opportunities will be in communities' defense of their livelihoods, cultural heritage, and natural environment against the monocultural influence of market capitalism. The discursive designs envisaged by Dryzek are oriented to the kind of public moral discourse about ends which is absent from liberal democratic politics, but of which there are hopeful glimmers in the formation of groups in civil society organized around local problems, environmental issues and risks.

Moreover, to be ecologically sustainable, institutions must foster ecologically responsible attitudes and personalities. This will imply modifications to the economic imperatives of the liberal political economy and making the sustainability imperative more compelling so that there is engendered a more principled adherence to the latter, rather than it being considered as an optional extra for times when the economic fundamentals are healthy. It will entail quite radical changes in the culture of educational institutions, particularly universities, which contribute substantially to ecological irrationality in the production of increasing numbers of graduates imbued with antiecological rationalities, in law, business management and economics.

Transforming the ontology of liberal democracy is more likely to be achieved by the initial refurbishment of its existing foundations. Thus individuality and its importance for human freedom might be retained and enlarged by deepening its understanding. This might be achieved from a communitarian perspective of self-in-community, which recognizes cultural influences on the self but does not submerge the self (Barns, 1996, 122). The essential characteristic of communal relationships, whether local, regional or global, is that they engender respect and understanding of other community members and their needs, as well as a sense of mutual obligation, which are preconditions for relations of empathy.

While I have been largely concerned to draw out the prospectivity for sustainability of each of the reconstructive proposals outlined in the discussion, there may also be some value in pulling together their points of intersection. Firstly, the fact that, aside from Wissenburg's minimalist reconstruction, all have, as a foundational premise, the acceptance of agency in and consequently the extention of moral recognition to nonhuman entities, indicates that a significant ethical reversal is required of existing liberalism. Secondly, these discussions - which theorize such matters as the need for a more inclusive notion of autonomy (Eckersley), the need for

a richer understanding of individuality (diZerega), the need for a broader conception of the good (Achterberg), and the need to expand liberalism's sphere of interests - all have, as an underlying concern, the problem of the primacy of the individual in liberal democratic theory. The picture they present is of a distorted notion of autonomy and a truncated notion of individuality, wherein individual autonomy is confused with radical individualism. This leaves the liberal individual poorly equipped to cope with the strong moral demands of sustainability imperatives.

Thirdly, many of the proposed responses to these perceived deficiencies revolve around the revalorization of the collectivity and community and therefore redressing the problems posed by rampant individualism. Thus, Barns's public ecological ethic enlarges the arenas of responsible action from the individual to the collective and attempts to redress the charge of the procedural republic's moral thinness. Mathew's lattice model and Thompson's relational networks promote empathic development (essential to diZerega's more complete individuality) through practical aid between communities and the fostering of mutual obligation, while for Dryzek the key to effective communication between human and natural systems is in maximizing the integration of political and ecological communication, again in discursive communities.

Taken together these contributions to ecodemocratic theory represent a significant body of argument for the reformulation of liberal democracy's foundational assumptions, ideals and its democratic practice. It is now clear that without significant reconstruction, the serious issues of ecological sustainability are unlikely to attain any prominence on the political agendas of liberal democracies. The impediments arrayed against the adoption of ecologically sound norms, values and practices are so comprehensive as to necessitate the use of a little "metaphorical imagination" (Buttimer, 1993, 79). The most appropriate metaphor which explains liberalism as a "form of arrested development" (Plumwood, 1996, 147) is that of the rebellious, egoistic adolescent who, in the self-identification process, selfishly demands his/her rights regardless of the effects on other family members, yet is reluctant to quit the material comfort, certainty and security of the family home and is therefore slow to assume responsible adulthood. Liberal democratic capitalism, in freeing itself of the shackles of its authoritarian feudal parent, has provided a comfortable degree of material welfare and certainty through heteronomous legal protection supported by a variety of rights, but has not, as envisaged by Hume (1969[1739], Bk. III, Sect. 2, 551), seen any "progress of the sentiments". The

emergent adult metaphor also provides clues to the direction liberalism might seek to develop its adolescent sentiments and thus to overcome the limits it places on democracy. In time morally mature adults are able to transcend the self-centredness of youth and to concern themselves with the wider social context, with the wellbeing of both personal and social relationships. A mature liberalism would reformulate those foundational assumptions which privilege individual independence and resituate justice and the rights that protect it in a framework of interdependency in order to overcome the tension, characteristic of liberal democracies, between individual and common interests. As diZerega (1996b, 715) remarks, "the 'self' in its commonsense meaning is at best a way station". In this, he echoes the sentiments expressed by Hume (1969[1739], 551):

> *Thus self-interest is the original motive to the* establishment *of justice*: *but a* sympathy *with public interest is the source of the* moral approbation, *which attends that virtue.*

CONCLUSIONS

7.1: Introduction

This thesis argues that the general social malaise of the late twentieth century bears many similarities to that which afflicted Western Europe in the seventeenth century, but that the present malaise is marked by two critical additional components, namely the global and the ecological. Just as the *philosophes* of that earlier time discerned the need to rethink the prevailing systems of values, knowledge and social organization underpinning all aspects of life, it is maintained that there is now a similar need to review the values, knowledges and institutions of liberal democratic modes of governance and examine their capacity to address the social and ecological crises of our time. The ideas and institutions which have evolved in response to the demands of life in the seventeenth century, that is the need for certainty and stability and freedom from arbitrary control, are insufficiently flexible and adaptive to meet the present day crises of a burgeoning human population, cultural diversity, global interdependence and ecological instability.

Furthermore, not only are existing social arrangements and their foundational values and ways of knowing limited in their capacity to respond to these novel conditions, but the ecological crisis itself is symptomatic of this general ethical, epistemological and institutional vacuum. Liberal democracies, as the offspring of that earlier period of social turmoil, appear to be reaching the limit of their capacity to address environmental issues in particular even if the problems of democratic and implementation deficits could be surmounted.

The ethical and institutional frameworks necessary to meet these emerging conditions and to allow humans to live sustainably have so far manifested only embryonically. However, just as in the early modern period social change was preceded by a general breakdown of trust in established institutions, so among citizens in western democracies there can be discerned a rising level of distrust in the capacity of governments and political systems to provide for general social need. Indeed, under the influence of the ideology of economic fundamentalism, governments have tended to abdicate many of their social responsibilities, resulting in declining general welfare and the upward ratcheting of social resources. In the private sector those institutions, such as banks, which originated with a social purpose, have also abrogated their social responsibilities under the same ideological influence. The interests of economic and governing elites now overlap so thoroughly

that economic and political spheres appear to many citizens to be completely self-serving and utterly unresponsive.

Under these conditions of deteriorating trust, one function of environmental political thought is to bring forward for consideration the context of the institutional arrangements of modern life. The background conditions of modern life have been largely ignored in favour of a preoccupation with individual choice and empirical events (Lynch and Wells, 1996). This is true especially in systems of neoclassical economics. The advent of an ecological crisis reveals the repression of the enabling conditions of political, economic and social life to have been a flawed strategy, for, as was argued in Chapter 3, a worthwhile human life is dependent on integrating foreground with background conditions.

7.2: Rethinking Enlightenment Ideals

The ecological and social crises call into serious question the continuing efficacy of the ideals of the Enlightenment *philosophes* of a rational social order founded on equality and justice and human emancipation achieved through the technological transcendence of nature. The rational order has turned dangerously irrational and is threatening existence itself. The crises engendered by the rational mastery ideal now raise serious questions about the level of risk to which the world's ecosystems are being subjected and have consequently precipitated renewed theoretical interest in the rationalities driving economic activity. Theorists have been critical of the dominance of instrumental rationalities over modern life since the time of Weber, but the recent emergence of an environmental ethic represents a particularly intense challenge to the rationalities which have come to submerge values in all life spheres except the spheres of economy and administration. Of crucial importance in explicating an alternative ecological rationality have been John Dryzek's efforts, firstly, in making the connections between environmental decline and the instrumental rationalities of business, science and bureaucracy and secondly in exposing the ecological irrationality of the social choice mechanisms relied upon by modern societies.

In the light of Dryzek's analysis, this research endeavours to demonstrate that solutions to ecological problems which rely solely on technical responses or individualistic market strategies, such as the privatization of commons resources, cost benefit analysis and so on, are limited in their utility because they are neither

communicatively nor ecologically rational. The legacy of Enlightenment modes of thought and the ascendancy of economic liberalism which favour applications of technology and bureaucratic management to solve problems limits and retards the possible range of responses to environmental and social crises.

This failure to generate an adequate response has also focussed attention onto the ideal of progress as the process of human emancipation. As the vehicle of progress, economic growth has meant material welfare for perhaps a sixth of the world's population but for the majority it remains an illusion. Progress premised on economic growth can now be credited with burgeoning ecological and social costs resulting in what Arendt called the "anarchy of progress" (cited in Beck, 1995a, 65). The failure of technical transcendence to human social and moral progress combined with the rising social and ecological costs of its pursuit results in a growing disenchantment, which for many, it seems, can only be lessened by consumption, since other values and the goods that they valorize have been diminished.

On the basis of these failings, a number of authors argue for a different objective for progress. Self (1993, 276), for example, puts the case for a qualitative adjustment to economic growth and its replacement with an ideal centred on enhancing the quality of life, while Craig Kuennen (1994, 62) argues that we do not have to give up on development but that it can be achieved by "less domineering means" through eschewing technical transcendence in favour of a co-adaptationist model of technology. This is a model wherein human action is harmonized and coevolves with the external environment. One of the objectives of non-domineering technologies is to maintain sufficient flexibility to adapt to changing external conditions, an objective which is beyond the capacity of many existing technologies. Thus the motor vehicle and its huge supporting infrastructure is the example par excellence of a rigid technology, which continues to consume an inordinate proportion of resources and to dominate its environment in spite of its universally acknowledged detrimental side-effects. Kuennen (1994, 63) maintains that "a true mark of progress will be the increasing transformation of our niche from its present disorganized mix of rigid, competing structures into an organized set of flexible components as compatible with each other as they are with the external environment".

Other theorists, such as Eder (1990b), hold that to escape the dominant European vision of progress requires the recovery of the communicative tradition in

western thought. Eder contends that progress results not only from technical development but also discursive communication which opens up opportunities foreclosed by technical rationality. Here Montainge's ideas on progress have much relevance for the present. For this early humanist, individual progress consisted in advancing towards wisdom, while social progress could be measured by the growth in creativity and the diversity of reality.

Sustainable progress implies the almost complete reversal of many current trends relating to quantitative growth and the eschewal of linear progress. If progress is to be retained as the myth enshrining human hopes for the future, it will need to be reoriented to furthering quality of life aspects and to adaptive technologies. There are just too many human lives which have not benefitted from technological progress and far too many have suffered from its ill-suited application.

Like the myth of progress, western ideals of equality and justice must also be rethought, for economic equality has been shown not to equate with justice. Rather the spread of capitalist economic culture is revealed as homogenizing and reductive of cultural and economic diversity, and therefore detrimental to capacities for social and ecological resilience. The notion of environmental justice has largely emerged as a reaction to the concentration of environmental bads in socially deprived areas in the United States. However, it has now been enlarged to refer to arguments for equality of distribution of both environmental bads and goods, thus encompassing issues of global equity and the maintenance of ecological functioning. Neither social nor ecological sustainability can be pursued to the exclusion of environmental justice concerns, while technical solutions to environmental problems can only be a holding exercise. Long-lasting solutions will also entail addressing issues of social inequality and political access.

The institutions which were the product of Enlightenment ideals have not only been hostile to nature but they have also been counterproductive for Enlightenment hopes for human development. They have been shown to have been defective in protecting the rights to autonomous development of a sizeable proportion of liberal subjects. Liberal democracies have relied on the culture of individualism to foster autonomy among liberal subjects, but, following on liberalism's paucity of moral resources, the development of the individual has been a one-sided one, compromised by the dominance of instrumental rationalities. Individual autonomy is a necessary precondition for the efficiency of the capitalist economy, but the price of

autonomy is neglect of its enabling conditions (Berger, 1992, 253). If liberal democracies are to survive as such, they need to reformulate not only the notion of autonomy, but also the notion of the common good, for as I argued in Chapter 3, these are interdependent objectives. Thus a fitting theory of the good must be able to provide an account of autonomy which is consistent with the flourishing of one's communal attachments and with the flourishing of nonhuman entities. Poole (1991, 87) and Lash (1994, 164-165) pursue the possibilities for developing a notion of the self consistent with the relationships of community, as discussed in Chapter 3. The resulting concept of autonomy might better be referred to as *bounded autonomy*, which is marked by relationships of reciprocity, care and responsibility for the viability of those interdependent relationships.

In a similar vein, Eckersley (1996b, 222ff.), in arguing for human environmental rights, has taken the liberal standpoint of autonomy and developed arguments for a more inclusive notion of autonomy, which is "socially and ecologically contextualised" (p.224). Her analysis rests on the expansion of moral considerability to nonhuman entities to enable them to flourish according to their 'species-life' and thus by extension to the conditions which enable that flourishing. It is a notion of autonomy which places responsibilities on humans to ensure the conditions for social and ecological sustainability and requires "the realignment of a range of 'liberal freedoms' in ways that are consistent with these ends" (Eckersley, 1996b, 223).

7.3: Ecological Responsibility

This section is principally concerned with how to resolve what Beck (1995a, 109) refers to as the "crisis of responsibility". In Chapter 1.9 I described how the institutions of modernity are organized to avoid responsibility, and in Chapter 3.2.2 I concluded that the assumption of responsibility has to be a key ethical component of the pursuit of sustainability. I am confining the discussion of the resolution to this crisis to those institutions around which the thesis is arranged, namely, the public sphere and democracy, markets and capitalism, and private property (on bringing science and technology into line, see Beck, 1995a, 169ff.).

What has made modern life remarkable is the detachment of the economic sphere, capital and markets, from its normative context, from social life, and from its biophysical base. Not only do markets have minimum ethical constraint, but they are

"distinguished from other realms of society by the fact that they only need a minimal morality to function" (Berger, 1992, 245). If markets are to be retained as supposedly democratic and efficient allocative and distributive mechanisms, then the connections to social and natural contexts must be enhanced, for, as Hirst (1994, 94) remarks, "a 'market society', that is a social system where the fate of the social fabric hangs on the outcome of purely private sales and purchases is unsustainable". The social environment of markets is also a concern for Hirst (1994, 65), who holds that in the "right kind of social context", the market system is a "viable economic mechanism". The appropriate social context for an efficient market system is not one dominated by individual morality but one of thickened social embeddedness. This is a society which is "complementary to the market principle, but in being complementary, uses non-market calculations and forms of resource allocation". It is also a society that has certain expectations of the market system concerning "acceptable levels of employment, investment and a suitable composition of output" (Hirst, 1994, 65). There is no guarantee, however, that a socially embedded market system would promote long-term ecological sustainability without specific normative and institutional commitments to this objective.

To promote ecological sustainability, Ekins *et al.* (1992, 80) similarly favour a progressive market as a system for organizing economic life, which includes not only information on price and quality, but also safety, production conditions, impacts on employees and the natural environment. This would require, firstly, that producers, perhaps organized by means of more numerous cooperative arrangements, commit to sustainability and its objectives and, secondly, that consumers be equipped with adequate information about production impacts in order to make informed consumption choices. Improved social regulation of the market system would then be based around principles of equity and sustainability as well as efficiency.

To operate at all sustainably though, the democracy of the market system, imperfect as it is, has to be complemented by democratic political institutions (Grabosky, 1995, 221). To perform this task, Hirst (1994, 68) mounts cogent arguments for an associational form of democratic governance, asserting that "associational governance may actually help to rebuild ties between groups, and facilitate the construction of national, regional or social foci of common identification". The reconstruction of community was identified in Chapter 3.5.4 as a critical component of sustainable economic relationships, as a precondition for awareness of the needs of future generations and other nonhuman entities.

Achterberg (1996, 184) also identifies "mutual identification" as a necessary precursor for the redistribution which is an inevitable precondition of sustainability.

Associations could also act as steerers of markets by strengthening the economic base of local and regional communities and other non-dominant economic actors, thereby not only counterbalancing the political power presently concentrated in political elites and formal political institutions but also raising political power to the level of market power. This latter outcome is construed by Self (1993, 275), in the context of the formation of the European Community, as a favourable development in pursuing social and environmental objectives and in controlling movements of capital, but the principle can well apply at other levels of governance. The aim of such a change is to reduce the contemporary dominance of markets in social choice and to reorient priorities to the social and ecological.

The irresponsibility of capital, especially transnational corporate forms, can also be countered by associative arrangements based on the cooperative ownership of enterprises, which assist the localization of capital and may prevent its absorption into the cycle of fictitious, speculative capital. These mutual forms of ownership require the support of local financial institutions, such as local development banks and credit unions, thus promoting local or regional investment and prosperity. The decision-makers of mutually-owned enterprises are also likely to have local connections and are therefore more likely to balance management decisions in the interests of employees and local citizens rather than in the financial interests of absentee shareholders or managerial executives.

While the social and political contexts of the capitalist market system can be reinforced as an antidote to the dominance of this social form, the market economy itself must also be sensitized to the destructive side-effects of its activities and its accountability enhanced. Work-place democratization and social regulation are favoured by some theorists (see Gould, 1988), but so far the former development has been minimal and the latter option is clearly not an option as long as neoliberal ideology holds sway. Rather than imposing accountability on economic entities heteronomously, Johannes Berger (1992) has explored the potential of "self-control" as a means of effecting institutional change in the economic sphere. He maintains that it is mainly because "the economic system succeeded in realizing a high degree of autonomy vis-à-vis its environment" that environmental issues have received only minimal attention in the economic sphere and this in spite of the efforts of new social

movements and the general public to raise awareness of social and ecological deterioration. The economic system is therefore structurally insensitive to environmental issues and can only perceive them in a distorted way via the medium of prices (Berger, 1992, 248). As the possibility of external control appears limited, the alternative is to increase spontaneous self-control in order to generate empathy in the system and hence increase its self-responsibility:

> The principle of self-control may be summarized as follows: the economy is restructured in a way that enables it to become aware of the side effects of economic decisions in the environment of the economy. As the capacity of self-control increases, the economic system stops maximizing efficiency without regard to the environment: the standards of a healthy environment are taken into account in decision making (Berger, 1992, 251-252).

Despite the differing opinions over the efficacy of market-based economic instruments (see Cairncross, 1991, 193-195 on the pros and cons), Berger (1992, 252) is of the opinion that they have some utility in that "[e]ach reorganization of the economy that is based on self-control amounts to an increase in the perceptive faculty of the economy". Improving the economy's capacity to perceive its environment increases its empathy with its environment and therefore limits the unprecedented autonomy of the economic sphere. Like the empathic liberal subjects discussed in Chapter 6.2, the self-binding economy is premised on self-awareness, which means that empathy is a function of types of control which reflect the negative side-effects of the economy's operations on its social and natural contexts. Reflexivity (including capacities for self-criticism) is thus a necessary precondition to the viability of economic systems operating in sympathy with their environments.

Reflexivity may also be interpreted as having a learning capacity, which capitalist systems have already demonstrated in their integration of social welfare ideas, although this accommodation has unravelled somewhat in recent years. There is therefore some grounds for optimism on this point, but, as Berger (1992, 253) indicates, there are two fundamental preconditions for effective self-control. Bearing in mind that the state is unlikely to simply fade away, the first step is for governments to give priority to environmental policy. I interpret this condition to mean that, at the very least, environmental agencies would be accorded mainline status along with bureaux of treasury, finance and trade in the senior ministries of liberal democratic governments. It must be said, however, that this is only a possibility where the conservation imperative is given equality with business and administration.

Secondly, the existence of the social movements which are presently attempting to influence public discourse over matters ecological and economic should be encouraged, because, as was argued in Chapter 2, their existence is critical to learning and reflexivity in both economic and administrative spheres. They are the only social elements which are in a position to expose the paradoxes and inconsistencies of ecologically destructive economic activity and bureaucratic decision-making. Neither of these preconditions appears to have the remotest possibility in the near future given that the interests of economic and governing elites now so closely coalesce around their imperative of continuing economic growth. However, the success of the German Greens in obtaining the finance portfolio and significant concessions on tackling the generators of major environmental problems following the recent elections may indicate a turning point.

If the market system is to be retained for its self-organizing and democratic allocative and distributive elements, the capitalist economy eventually has to account for ecological values in more than a cursory way, because continuing economic activity on the present scale is undermining the conditions of production. Moreover, if the market economy is to retain the autonomy which promotes efficiency, it must be a *bounded autonomy*, operating within a social framework that enjoins in it capacities for learning and reflexivity and thus self-control. The state would then act as the facilitator of ecological responsibility in economic activity. It can achieve these functions by setting an appropriate normative framework within which firms and consumers operate and by giving priority to environmental policy.

As the structural imperatives of state and capital are so strongly integrated and prospects for the general dispersal of the abovementioned conditions somewhat unprospective, the most promising option to effect an ecologically responsible society is a strong civil society oriented to the commons rather than private interests, thereby strengthening the public spheres which have crystallized around the activities of new social movements and instigated the beginnings of the necessary decoupling of the public from the state. This is the conclusion reached by other theorists of the capitalist political economy, such as Dryzek (1996c) and O'Connor (1994a). The latter maintains that a strong civil society "defining itself in terms of its "commons", its solidarity, and its struggles with capital and state, as well as its democratic impulses and forms of organization within alliances and coalitions of movement organizations ... [is] the first prerequisite of sustainable society and nature" (O'Connor, 1994a, 172). Additionally, Dryzek (1996c, 481-482) argues that power

can be exercised from within civil society to change the terms of public discourse, public policy and political culture, whilst also affecting ethics and culture outside the public policy arena in everyday life. Ecology movements have already achieved awareness of environmental issues and stimulated consciousness of individual and collective responsibility for systemic impacts.

The structural dominance of the system of capitalist economy is due, in no small measure, to a system of property allocation which conflates rights to the capital means of production with rights to personal property and attributes to the holders of corporately-controlled resources rights to which not even individual owners are entitled (Hawken, 1993, 107-108). To ensure that property ownership is ecologically responsible will require radical change in the moral basis of property, in its justifications, and in attitudes to land. Firstly, a differentiation between control and ownership will need to be made. It is control that confers on owners the right to take whatever actions they so desire without regard to the interests of others. The concentration of resources in the hands of corporations confers on their management executives an inordinate degree of control and power to pursue corporate activities without due regard for future generations and the general interest.

Secondly, to be ecologically sustainable, property structures must be regrounded in the communal/material basis of existence. This will mean, firstly, divorcing property rights in land from property rights in personal possessions. Absolute control of the material means of existence is simply a fiction which must be overturned. This will imply, secondly, rethinking attitudes to land, which can no longer be considered as inert parcels of physical nature predestined for human utility. Rather, all land has to be regarded as contributing to ecological processes which are a public good and to which all individuals and species have an entitlement. Lockean arguments for property, which underpin notions of absolute control, have been shown to have shaky moral foundations. As Wissenburg (1998, 119) concludes, self-ownership is not a sufficient moral basis and, for the most part, the rights to make use of the endowments of nature are *conditional* rather than *absolute* or even *unconditional* rights. Conditional rights involve the right to *use* a good rather than to possess it absolutely "and to use it only in particular ways, places, periods or circumstances" (Wissenburg, 1998, 120). It is sufficient for most individuals' life plans that they have the rights to own, use and manage the goods in their legitimate possession. Kantian-derived reciprocal rights and duties can take care of spatially and temporarily proximate property relations but an ecologically sustainable system

of property must have a different moral basis, where the interests of nonhuman entities and future generations are assured by a broader basis of stewardship. The moral basis of sustainable property structures should emphasize responsibilities to connections and the stewardship role.

7.4: Sustainability: Preconditions

It was argued in Chapter 3.5 that, if sustainability is to constitute the required redefinition of the economic problem now confronting market societies, then it has to be approached as a 'whole of society' problem (in Gare's (1995, 74) terms), just as the classical economists interpreted their contemporary economic problem as a political-economic one. The problem of ecological limits to resource exploitation is not simply an environmental one to be resolved through applications of technical reason but a social one to be addressed by an integrated package of ethical, political, economic and technical transformation. The first precondition then is that social and ecological sustainability are predicated on the ecological restructuring of society, not on ecological modernization.

The second precondition relates to the assumptions of capitalist economics, namely, that land or the biophysical environment can be treated simply as the background to human affairs and as an inert factor of production. The neoclassical economic triad of land, labour and capital could stand an injection of Marxian understanding, that capitalist production is dependent on the communal/social infrastructure and on the material or biophysical framework *in toto*. Economic development cannot be reduced to 'economic growth'. In the words of Wackernagel and Rees (1996, 144), the "supra-economic role of natural capital" has to be recognized.

Beyond the immediate interests of nature, the interests of future generations also have to be institutionally provided for, for as Norgaard and Howarth (1991) note, even negative discount rates will not necessarily ensure that the needs of the future will be properly taken into account, while markets are certainly restricted to contemporary needs and imperfectly so at that. Specific provision has to be made in the form of savings or direct allocation and this strengthened by a normative orientation to the future.

Other preconditions identified in Chapter 5 are the fostering of a civic culture and ecological citizenship, an institutionalized capacity for learning as a precondition for adaptability and flexibility, and the adoption of simpler lifestyles by those in the First World in parallel with the redistribution necessary to make provision for the basic needs of those in the Third World.

7.5: Beyond Sustainability

While the arguments of this thesis have been principally concerned with the pursuit of sustainability, this is not where social transformation should end, for sustainability is a principle only for stabilization and mere survival. Sustainability, it may be argued, is but an interim phase in the pursuit of a liveable society. As Wackernagel and Rees (1996, 136-137) observe, communities need breathing space to restore, strengthen and revitalize themselves and particularly to develop the shared values and mutuality necessary for the restoration of civil society. The social contract on which this strengthened civil society is founded is a balance of individual and community needs where rights and responsibilities are of a piece.

However, while improved community cohesion, both local and global, may be an advantageous outcome of the search for sustainability, there are also dangers. Timothy Luke (1993) cautions that the concept of sustainability is such as to lend itself to bureaucratic capture and thus to provide the pretext for further bureaucratic intervention into daily life. What may eventuate is not the communally-directed steady state but an "environmentalizing state", which is no improvement on its welfare predecessor. "It simply places welfare states on an ecological footing and deputizes their administrative personnel as bureaucratic greens" (Luke, 1993, 153) with an unwarrantable surveillance capacity to coerce the health and wellbeing of their citizens.

Nevertheless, sustainability could fulfill the hope, expressed by Wissenburg, that it may promote the rejuvenation of liberal democracy. It may compel liberal societies to rethink the unquestioning priority accorded individual producer and consumer preferences and to invalidate the almost religious faith that economic liberals have in the free market to provide for all of society's needs. It may also steer liberalism towards concepts of autonomy and human freedom more consonant with the autonomous development of other species, expanding the concept of self-interest and reorienting the notion away from its contemporarily dominant form of rational

egoism. As a consequence, liberalism may yet be characterized by the expanded sense of self promoted by ecophilosophers and a richer notion of individuality, thus amplifying individual capacity for empathy, care and responsiblity. Innovations such as these will be necessary to the liveability of liberal democracies and sustainability may thus foster the social and moral progress that was once the expectation of technological transcendence.

7.6: Ecological Enlightenment and Maturity

I began this thesis with the Enlightenment and it also serves as a fitting conclusion. I argued that Kant's hopes for enlightenment remain unfulfilled in that we are neither free nor mature. By David Orr's (1994, 77) yardstick, we will only demonstrate maturity as a species when we have the capacity to value those "life-forms, landscapes and ecological processes" presently considered to be valueless, when we can routinely value that which has no obvious utility to humans. Alternatively, we may be said to be mature when we have developed "our capacity to identify with the biotic community and to shelter life".

The moral maturity of any society which is coming up against biophysical limits will consist of its acceptance of limits on its projects and taking responsibility for any side-effects that they may generate. In part this will also involve overcoming enslavement to instrumental rationality and technology as the only route to problem-solving and developing foundational understandings more consistent with an environment of biophysical limits and ecological uncertainty. Furthermore, those limits and constraints will be embedded in institutional design.

The institutions of industrial societies can be described as both morally and ecologically immature. To employ the metaphor of plant succession, capitalist societies have not outgrown the pioneer stage of succession which is characterized by a high and wasteful use of energy, with minimal diversity, and producing plants of generally lower quality and usefulness (Hawken, 1993, 19ff.). In an ecosystem, more mature successional forms are marked by energy-efficient and resource-conserving plants as energy is converted into more diverse, complex and stable forms of organization. The function of pioneer life forms is to prime the soil for the more mature and complex forms that follow. During the pioneer stage, energy is mostly devoted to new growth, while in the later stages of succession, energy is dedicated to maintaining existing communities. The ecology of industrial societies apes the

resource-greedy, competitive and aggressive pioneer plant communities and, although the need to respond to emerging ecological limits is accepted, industrial social forms have responded only minimally. To the extent that industrial societies have so far failed to develop more stable, resource-conserving and energy-efficient social forms dedicated to maintaining existence, they can be said to be immature. The capitalist economic form of social organization remains a pioneering colonizer even after several centuries and is perhaps functionally limited to that role.

How do we transcend the constraints of pioneering capitalist societies? The rational-analytic thinking mode that has dominated western thought and practice throughout modernity can only conceptualize what is. What we need to be able to conceptualize is what can be. This is a time, as Buttimer (1993, 77-79) says, for metaphorical not analytical thinking. Metaphor can set the "cognitive juices" (Buttimer, 1993, 84) flowing, exposing inconsistency in established social values and conventions, and revealing insight because "it touches a deeper level of undertanding than "paradigm", "model" or "theory". It points to the very process of learning and discovery, to those analogical leaps from the familiar to the unfamiliar which rally imagination and emotion as well as intellect" (Buttimer, 1993, 78). Metaphor can assist the adoption of that ironic stance advocated by Foucault, thus to seek, in the present, design possibilities for ecologically sustainable modes of dwelling. Metaphor can help to discern the possibilities for higher order integrations in contemporary trends such as cultural diversity, globalization and localism[67]. These higher order integrations may manifest as more ecologically sensitive modes of thought and more diverse, more flexible and therefore more stable organizational forms than the rigidities of capitalist regimes of production and analytic/instrumental modes of thought have so far afforded. Here we may divine opportunities for the social re-embedding and community-building that will be the necessary precursors to these more stable and satisfying social forms. The ecological society that is the objective of ecological restructuring promises to be an enlightened society that embraces life in all its diversity, dwelling responsibly and wisely. Thus, following Montaigne's example, *vivereamus sapienter.*

[67]For a summary of such trends, see Lash and Urry (1987, 300-313).

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